



CITY OF SOMERVILLE
ANNUAL REPORTS.

1886.



SOMERVILLE, MASS.:
SOMERVILLE JOURNAL PRINT.
1887.

CITY OF SOMERVILLE.

CITY GOVERNMENT AND OFFICERS FOR 1886.

MAYOR.

MARK F. BURNS.

Residence, 95 Perkins Street; office, City Hall.

ALDERMEN.

IRVING L. RUSSELL, *President*.

WARD ONE.

MOSES G. STEELE Rush Street.
ELBRIDGE G. PARK Arlington Street.

WARD TWO.

SAMUEL W. HOLT Washington Street.
DANA W. DENNETT Washington Street.

WARD THREE.

DANIEL C. STILLSON Tennyson Street.
HARRISON ALDRICH Gilman Street.

WARD FOUR.

IRVING L. RUSSELL Broadway.
ALBERT M. ROBINSON Belmont Street.

CLERK OF BOARD OF ALDERMEN.

CHARLES E. GILMAN.

COMMON COUNCIL.

WALTER C. MENTZER, *President.*

WARD ONE.

JOHN MANNING	Medford Street.
NATHAN H. REED	Florence Street.
FRANK G. LOMBARD	Mt. Vernon Street.
GEORGE D. WEMYSS	Austin Street.

WARD TWO.

CHARLES P. LINCOLN	Laurel Street.
CHARLES L. NORTH	High Street.
ABRAHAM A. ELSTON	Springfield Street.
TIMOTHY C. DWYER	Somerville Avenue.

WARD THREE.

JOHN F. KENNARD	Howe Street.
EDWARD O'BRIEN	Lowell Street.
ROBERT DUDDY	Bond Street.
ELISHA B. SEARS	Medford Street.

WARD FOUR.

BERNARD W. LAWRENCE	Holland Street.
WALTER C. MENTZER	Cedar Street.
LOUIS E. MERRY	Dover Street.
EDWARD H. BRADSHAW	Cambria Street.

CLERK OF COMMON COUNCIL

DOUGLAS FRAZAR.

JOINT STANDING COMMITTEES FOR 1886.

ACCOUNTS. — Aldermen Aldrich, Robinson; Councilmen Bradshaw, Lombard, North.

BURIAL-GROUNDS. — Aldermen Park, Aldrich; Councilmen Kennard, Reed, Lincoln.

CITY ENGINEERING. — Aldermen Russell, Stillson; Councilmen Manning, Duddy, Merry.

CLAIMS. — His Honor the Mayor, *ex officio*; Alderman Holt; the President of the Common Council, *ex officio*; Councilmen Dwyer, Wemyss.

FINANCE. — His Honor the Mayor, *ex officio*; Aldermen Park, Bennett; the President of the Common Council, *ex officio*; Councilmen Kennard, Lombard, Bradshaw, North.

FIRE DEPARTMENT. — Aldermen Robinson, Holt; Councilmen Kennard, Lawrence, Wemyss.

FUEL AND STREET LIGHTS. — Aldermen Steele, Aldrich; Councilmen Reed, Sears, Dwyer.

HIGHWAYS. — Aldermen Russell, Holt; Councilmen Manning, O'Brien, Merry.

LEGISLATIVE MATTERS. — His Honor the Mayor, *ex officio*; Alderman Robinson; the President of the Common Council, *ex officio*; Councilmen Sears, Lincoln.

ORDINANCES. — Aldermen Bennett, Stillson; Councilmen Sears, Elston, Wemyss.

PRINTING. — Aldermen Robinson, Stillson; Councilmen Lawrence, Lincoln, Duddy.

PUBLIC PROPERTY. — Aldermen Stillson, Park; Councilmen Lawrence, Elston, Duddy.

SOLDIERS' RELIEF. — Aldermen Holt, Russell; Councilmen Manning, Dwyer, Merry.

WATER. — Aldermen Steele, Robinson; the President of the Common Council; Councilmen Reed, O'Brien.

COMMITTEES OF THE BOARD OF ALDERMEN.

(STANDING COMMITTEES.)

ELECTIONS. — Aldermen Bennett, Steele.

ENROLLED ORDINANCES. — Aldermen Aldrich, Park.

LICENSES. — Aldermen Aldrich, Holt.

POLICE. — His Honor the Mayor, *ex officio*; Aldermen Aldrich, Robinson.

SEWERS. — Aldermen Stillson, Bennett, Russell.

STATE AID. — Aldermen Bennett, Russell, Steele, Stillson.

(SPECIAL COMMITTEE.)

BUILDING PERMITS. — Aldermen Russell, Robinson.

STANDING COMMITTEES OF THE COMMON COUNCIL.

ELECTIONS AND RETURNS. — Councilmen Bradshaw, North, Lombard.

ENROLLED ORDINANCES AND RESOLUTIONS. — Councilmen Lawrence, O'Brien, Elston.

SCHOOL COMMITTEE.

MARK F. BURNS, Mayor, Chairman, *ex officio*.

WALTER C. MENTZER, President of the Common Council, *ex officio*.

(Term three years.)

WARD ONE.

JOHN H. BUTLER (elected 1884) . . . Pearl Street.
 S. NEWTON CUTLER (elected 1885) . . . Pearl Street.
 HORACE C. WHITE, M.D. (elected 1883) . . . Arlington Street.

WARD TWO.

A. H. CARVILL, M.D. (elected 1885) . . . Bow Street.
 JAMES F. BEARD (elected in convention in 1886
 for unexpired term) . . . Prospect Hill Av.
 CHARLES I. SHEPARD (elected 1884) . . . High Street.

WARD THREE.

NORMAN W. BINGHAM (elected 1885) . . . School Street.
 Q. E. DICKERMAN (elected 1883) . . . Central Street.
 WILLIAM P. HILL (elected 1884) . . . Sycamore Street.

WARD FOUR.

MARTIN W. CARR (elected 1884) . . . Craigie Street.
 PROFESSOR BENJAMIN G. BROWN (elected 1885) . . . Professors' Row.
 H. P. MAKECHNIE, M.D. (elected 1883) . . . Elm Street.

Superintendent and Secretary, J. H. DAVIS, Myrtle Street.

ASSESSORS.

(Term, three years.)

STILLMAN H. LIBBY (elected 1886), *Chairman*, Elm Street.
 GEORGE W. HADLEY (elected 1885) . . . Perkins Street.
 BENJAMIN F. THOMPSON (elected 1884) . . . Summit Avenue.

ASSISTANT ASSESSORS.

(Term, one year.)

GEORGE W. BARTLETT, Ward One	.	.	Mt. Vernon Street.
WILLIAM A. FLAHERTY, Ward Two	.	.	Washington Street.
HIRAM D. SMITH, Ward Three	.	.	Cross Street.
SAMUEL T. RICHARDS, Ward Four	.	.	Summer Street.

BOARD OF HEALTH.

(Term, Physician, three years; other members, two years.)

GEORGE A. KIMBALL (appointed 1885),	<i>Chairman.</i>	Office, City Hall.
GEORGE C. SKILTON (appointed 1886)	.	Walnut Street.
THOMAS M. DURELL, M. D. (appointed 1885),		Bow Street.
<i>Clerk,</i> GEORGE I. VINCENT	.	Office, City Hall.
<i>Inspector,</i> WILLIAM H. BRINE	.	40 Houghton Street.

COMMISSIONERS OF THE SINKING FUNDS.

(Term, three years.)

NATHAN TUFTS (elected 1886)	.	.	Summer Street.
HENRY F. WOODS (elected 1885)	.	.	Sycamore Street.
EZRA D. CONANT (elected 1884)	.	.	Pearl Street.
<i>Treasurer,</i> AARON SARGENT,			Broadway.

OVERSEERS OF THE POOR.MARK F. BURNS, Mayor, *Chairman ex officio.*

HERBERT E. HILL, elected 1886 for 4 years	.	Mt. Vernon Street.
CHARLES S. LINCOLN, elected 1885 for 2		
years	.	Laurel Street.
EDWARD GLINES, elected 1885 for 3 years	.	Highland Avenue.
CHARLES G. BRETT, elected 1885 for 4 years		Hall Street.
<i>Agent,</i> CHARLES C. FOLSOM;		Office, Police Building, Bow Street.
<i>Secretary,</i> GEORGE T. LINCOLN;		Office, Police Building, Bow Street.

REGISTRARS OF VOTERS.

CHARLES E. GILMAN, *City Clerk.*

SAMUEL G. A. TWYXCROSS (appointed 1886 for 3 years).

JOHN R. CONANT (appointed 1884 for 3 years).

CROMWELL G. ROWELL (appointed 1886 for unexpired term).

SOMERVILLE MYSTIC WATER BOARD.

(Term, one year.)

J. ORLIN HAYDEN, <i>President</i>	.	Hill Building, Union Square.
WALTER S. BARNES	.	Highland Avenue.
CHARLES H. BROWN	.	Sycamore Street.
JOHN M. WOODS	.	School Street.
MILO CRANE	.	Rush Street.
<i>Superintendent of Water Works, NATHANIEL DENNETT.</i>		
Office, Prospect Street, cor. Somerville Avenue.		

TRUSTEES OF THE PUBLIC LIBRARY.

(Term, three years.)

CHARLES S. LINCOLN (elected 1885), <i>President,</i>	Laurel Street.
CHARLES G. POPE (elected 1885)	Franklin Street.
J. HENRY FLITNER (elected 1886), <i>Secretary,</i>	Day Street.
GEORGE A. BRUCE (elected 1886)	Highland Avenue.
WILLIAM E. WELD (elected 1884)	Harvard Street.
JAMES E. WHITAKER (elected 1885 for unexpired term)	Sycamore Street.
WILLIAM H. BRINE (elected 1886)	Highland Avenue.
SANFORD HANSCOM, M. D. (elected 1885 for unexpired term)	Webster Street.
CHRISTOPHER E. RYMES (elected 1885)	Summer Street.
<i>Librarian, HARRIET A. ADAMS.</i>	
<i>Assistant Librarian, LIZZIE A. STEVENS.</i>	

CITY CLERK AND CLERK OF BOARD OF ALDERMEN

CHARLES E. GILMAN. Office, City Hall.

CITY TREASURER AND COLLECTOR OF TAXES.

JOHN F. COLE. Office, City Hall.

CITY MESSENGER.

JAIRUS MANN. Office, City Hall.

CITY SOLICITOR.

SAMUEL C. DARLING. Office, 18 Rogers Building, Boston.

CITY AUDITOR.

DOUGLAS FRAZAR. Office, City Hall.

CITY ENGINEER.

GEORGE A. KIMBALL. Office, City Hall.

SUPERINTENDENT OF STREETS.

FRANK G. WILLIAMS, Albion Street. Office, City Hall.

SUPERINTENDENT OF PUBLIC BUILDINGS AND LIGHTS

THOMAS R. ROULSTONE. Office, City Hall.

CHIEF OF POLICE.

MELVILLE C. PARKHURST, Police Station, Bow Street.

CHIEF ENGINEER OF FIRE DEPARTMENT.

JAMES R. HOPKINS. Office, Engine House, Highland Avenue.

INSPECTOR OF BUILDINGS.

ELIJAH WALKER, Pleasant Avenue.

INSPECTOR OF MILK.

THOMAS CUNNINGHAM, Oak Street.

CITY PHYSICIAN.

THOMAS M. DURELL, M. D , 14 Bow Street.

CLERK OF ASSESSORS AND COMMITTEES

GEORGE I. VINCENT. Office, City Hall.

ASSISTANT CLERK OF ASSESSORS AND COMMITTEES.

WILLIAM P. MITCHELL. Office, City Hall.

CONSTABLES.

JAIRUS MANN.	WM. H. BRINE (Houghton St.)
ROBERT R. PERRY.	WILLIAM D. HAYDEN.
HORACE B. RUNEY.	SAMUEL R. DOW.
CHARLES C. FOLSOM.	JOSEPH J. GILES.
EDWARD MCGARR.	GEORGE CULLIS.
	C. C. CAVANAGH.

FIELD-DRIVERS.

JOHN E. FULLER.	HERBERT H. MILLER.
JUDSON W. OLIVER.	EDD. F. FALES.
GEORGE H. CARLETON.	GEORGE W. BEAN.

FENCE-VIEWERS.

DAVID A. SANBORN.	CHARLES D. ELLIOT.
-------------------	--------------------

POUND-KEEPER.

CHARLES A. SMALL.

SEALER OF WEIGHTS AND MEASURES.

NOAH HARDING, Sycamore Street.

SURVEYOR OF WOOD, BARK, AND LUMBER.

SAMUEL T. LITTLEFIELD.

SURVEYOR OF STONE, BRICK, AND PLASTER WORK.

ALFRED M. SIBLEY.

SURVEYOR OF MECHANICS' WORK.

CHARLES D. ELLIOT.

PUBLIC WEIGHERS.

J. C. COUSINS.

JOHN CRAIG.

UNDERTAKERS.

HORACE B. RUNEY.

A. L. SANBORN.

PATRICK RAFFERTY.

WILLIAM A. FLAHERTY.

P. H. RAFFERTY.

HORACE D. RUNEY.

E. H. MARSH.

THOMAS J. BARKER.

POLICE DEPARTMENT.M. C. PARKHURST, *Chief.*R. R. PERRY, *Captain.*S. R. DOW, *Sergeant.*EDWARD MCGARR, *Sergeant.*C. C. CAVANAGH, *Sergeant.*

JOHN E. FULLER.

P. W. SKINNER.

A. L. STAPLES.

S. A. BROWN.

J. W. OLIVER.

JOHN HAFFORD.

GEORGE W. BEAN.

IVAN LEIGHTON.

GEORGE L. SMITH.

M. H. KINSLEY.

EDWARD M. CARTER.

G. A. BODGE.

E. F. FALES.

DENNIS KELLY.

J. F. JOHNSON.

GEORGE H. CARLETON.

E. A. CARTER.

H. H. MILLER.

ANSON H. EATON.

EDWARD E. HAMBLÉN.

M. C. PARKHURST, *Lock-up Keeper.*

MEETINGS.

BOARD OF ALDERMEN.

Second and fourth Tuesday evenings of each month.

COMMON COUNCIL.

Wednesday evenings following the second and fourth Tuesdays of each month.

SCHOOL COMMITTEE.

Last Monday evening of each month.

MAYOR'S INAUGURAL ADDRESS.

CITY OF SOMERVILLE.

IN BOARD OF MAYOR AND ALDERMEN, }
JANUARY 13, 1886.

ORDERED, That the Committee on Printing be and they are hereby authorized to cause to be printed for public use three hundred and fifty copies of the Inaugural Address of his Honor the Mayor, delivered at the inauguration of the present City Government.

Order received its first and second readings and final passage, and sent down for concurrence.

CHARLES E. GILMAN, *City Clerk.*

IN COMMON COUNCIL, JANUARY 13, 1886.

Order adopted by receiving its first and second readings and final passage in concurrence.

DOUGLAS FRAZAR, *Clerk.*

INAUGURAL ADDRESS
OF
HON. MARK F. BURNS,

DELIVERED JAN. 4, 1886.

GENTLEMEN OF THE CITY COUNCIL : —

Before calling your attention to the business and wants of the various departments of our City Government, I desire to thank the citizens of Somerville for again honoring me with an election to the important position of chief executive officer. All that I can give in return for this generous mark of their confidence will be freely given. I shall devote my time and best efforts that they may have a substantial and economical administration of the city's affairs.

In accordance with the usual custom, I have prepared for your information and assistance the following statement of the business and requirements of the different departments. The recommendations herein contained are such as my experience leads me to think should be adopted, but if they do not appeal to your best judgment you should reject them.

Your attention is first called to the following financial statement : —

FINANCES.

It appears by the forthcoming report of the Sinking Fund Commissioners, an abstract of which has been kindly furnished me by their treasurer, Mr. Aaron Sargent, that the sinking funds, January 1, 1885, amounted to \$505,852.52, to which amount was added during the year from contributions by the city and interest on investments the sum of \$71,305.66, making total amount \$577,158.18. From this amount \$60,000 has been paid to the city treasurer to provide for the extinguishment of that part of the

funded debt of the city which matured as final maturity July 1, 1885, leaving the amount of the sinking funds now on hand \$517,158.18. All of said funds are invested in Somerville City Bonds, except \$4,158.18 which is on deposit at Maverick National Bank; that is, the Sinking Fund Commissioners actually have in their possession \$513,000 of our bonds, upon which they receive annually from the city \$25,850 for interest.

The inaugural address last year was written before the annual report of the Commissioners was received, and an error of \$1,780.48 was made in the statement of the amount of sinking funds then on hand; in the following statement the error has been corrected:—

Funded debt of the city, January 1, 1885.....	\$1,585,000 00
Less sinking funds.....	505,852 52
	1,079,147 48
Which made the net funded debt.....	\$1,079,147 48
The funded debt, January 1, 1886, was.....	\$1,525,000 00
Less sinking funds on hand.....	517,158 18
	1,007,841 82
Leaves the net funded debt at the present time,	\$1,007,841 82

The unfunded liabilities are for temporary loans, \$175,000, and this amount is exceeded by uncollected taxes, assessments, and accounts due by \$8,054.98, which being taken from the funded debt leaves the net debt of the city, January 1, 1886, \$999,786.84. The net debt of the city one year ago, according to the report of the treasurer, was \$1,065,389.02, which shows that the net indebtedness of the city has been reduced the past year, \$65,602.18. The following table, furnished by the city treasurer, will show the annual reduction in the net debt since 1876, when the city debt was largest:—

1877	\$34,446 00
1878	44,196 00
1879.....	72,345 00
1880	23,971 00
1881	50,333 00
1882	94,169 00
1883	74,172 00
1884	35,705 00
1885.....	64,602 00

It will be noticed that the indebtedness of the city was reduced \$29,897 more in 1885 than in 1884.

The real estate in the city was valued last year at \$23,063,900 ; the personal property at \$1,814,500 ; total valuation, \$24,878,400. The tax rate was \$16.60 on each \$1,000, and together with 7,812 polls assessed brought \$428,605.44, the amount of the tax levy.

The following is the valuation, tax levy, and rate during the past ten years : —

YEAR.	VALUATION.	TAX LEVY.	RATE.
1876.....	\$26,573,400.....	\$504,745 24.....	\$18 60
1877.....	25,479,400.....	471,789 14.....	18 10
1878.....	20,976,900.....	409,497 10.....	19 00
1879.....	18,950,100.....	352,553 80.....	18 00
1880.....	20,458,100.....	402,927 71.....	19 10
1881.....	22,569,100.....	452,945 45.....	19 50
1882.....	23,162,200.....	425,721 16.....	17 80
1883.....	23,812,900.....	411,645 43.....	16 70
1884.....	24,331,100.....	418,750 26.....	16 60
1885.....	24,878,400.....	428,605 44.....	16 60
1876.....	Number of polls assessed.....		4,105
1885.....	“ “ “ “.....		7,812
	Increase in “ “ “ “.....		3,707

The Legislature of 1875 enacted a law which obliged Somerville to “establish a sinking fund, and contribute thereto from year to year an amount raised annually by taxation sufficient, with its accumulations, to extinguish the debt at maturity,” or in twenty years from that time, except the water debt, which must be paid in thirty years. In the same law the limit of municipal indebtedness was fixed at three per cent of the valuation. As the funded debt of Somerville at that time was, and has been ever since, more than three per cent of the valuation, the debt has not been increased since that time for any purpose ; but the sinking fund was established and contributions have been made thereto in accordance with the provisions of the law until we now have in the sinking funds \$517,158.18, as above stated, leaving our net funded debt at about \$1,000,000. The law was a very wise one, intended to check municipal extravagance, and it accomplished the object, but it was a hard law for us to obey, as our funded debt was very large in proportion to our valuation, and the sinking fund contributions required to be made each year have been a heavy tax upon our people, but it has been accomplished and the provisions of the law fulfilled to the very letter. As the debt of the city was con-

tracted for improvements which will benefit the people of future generations, it seems wrong to require it to be paid in so short a time. If the city could be allowed ten or twenty years longer in which to pay the balance of the debt, the burden of taxation would be very much lightened. The lesson of economy has been taught and the object of the legislation accomplished, and it seems to me the law should now be changed so that we may have more time in which to extinguish the debt. I would therefore recommend that an earnest effort be made to induce the present Legislature to so modify the law as to allow the sinking funds to be applied to the payment of the debt, and the time for the payment of the balance extended twenty years. If this can be done, the rate of taxation in our city may be reduced two dollars on a thousand. Such a change in the law would contribute materially to the prosperity of our city. Without it there seems but little chance to reduce the rate of taxation, at least as long as we are obliged to meet the requirements of a rapidly increasing population. Somerville has increased in population during the past five years at the average rate of one thousand a year, of course requiring increased expenditure for educating the children and cost of providing streets, sidewalks, sewers, and water for the houses in which they live. While this continues the necessary expenses will be high, and it seems to me we are entitled to some relief from the Legislature.

During the last session of the Legislature, that of 1885, a law was passed reducing the limit of municipal indebtedness to two and one half per cent of the valuation, and limiting the rate at which property could be taxed to twelve dollars on a thousand, exclusive of State tax, county tax, and sums required by law to be raised on account of city debt; also repealing the law which has allowed us to borrow money in anticipation of the next year's taxes. The operation of this law will oblige every committee and board, including the School Committee, to confine their expenditures to the amount appropriated by the City Council, since, if there should be no surplus in any appropriation which could be transferred, there would be no possible way in which the bills could be paid. It will be very readily seen that as our indebtedness is now above the limit established by law, namely, two and one half per cent of the valuation, the funded debt cannot be increased, we cannot increase our temporary loans in anticipation of

the taxes of the next year, the treasurer can pay out no money except upon the Mayor's warrant, and the Ordinances prohibit the Mayor drawing his warrant for the payment of money after an appropriation is exhausted ; so if there are no unappropriated funds there would be no possible way in which the bills could be paid. It was clearly the intention of the Legislature to confine the expenditures of committees and boards to the amount appropriated by the City Council. I believe this is right. The amount appropriated for any department, while perhaps it may not be as much as a member of that committee may desire, or as much as he thinks should be used for the purpose, it nevertheless represents the sum the City Council, in their united wisdom, have determined should be expended in that department. This legislation is very important, and, in my opinion, eminently wise. A large debt is burdensome to the tax-payers ; a high rate of taxation injurious to the city ; certainly nothing can be more dangerous than a thoughtless expenditure of money, regardless of the sum appropriated. It is, therefore, the duty of the committees and boards to cease operations whenever their appropriation appears to be exhausted, and if they do not they should be stopped by order of the City Council.

HIGHWAYS.

The amount expended on highways in 1885 was \$33,200. The recommendation of last year, that of applying the principal part of the appropriation to the repairs of old streets, was adopted by this department, and with good results. Substantial repairs were made on Linwood, Medford, and Washington streets, which have been long needed. The improvement has been of great benefit to the property owners, and must be very gratifying to all who use those streets. I believe this policy should be continued until all of our streets are placed in first-class condition.

Early in the season the street watering was transferred from the charge of the highway committee to the committee on water, much to the satisfaction of all parties. I would recommend as a still further improvement that the care of the Park and of Central Hill, including the grounds about the City Hall and Public Library, be transferred to the committee on burial grounds, and that the style of the last-named committee be changed to committee on public grounds. If this change is made, the labor of the committee on

highways will be very much reduced and the other committee be given something to do, thereby dividing the work more equally among the committees. The work can be as economically done, with less confusion in the accounts, and be done more satisfactorily every way, with less danger of the money appropriated for one purpose being used for another.

STREET LIGHTS.

One naphtha and sixteen gas lamps have been added to our street lights the past year, making 394 gas and 70 naphtha lamps used in lighting the streets at the present time. Their care and maintenance and the lighting of the streets cost the city \$8,773 in 1885.

While the lamps have been kept cleaner and in better condition, and been kept burning more nights than usual the past year, still the people are not wholly satisfied, and probably will not be until the lamps are lighted every night and kept burning until near morning. It is doubtful if the work can ever be done satisfactorily under the contract system, but if it is continued under the old plan it is hoped that the City Council will be able to provide a more liberal appropriation.

An ordinance was enacted last year which provided for the appointment of a superintendent of public property and street lights, who is to have charge of the repairs and alterations of the public buildings, under the direction of the committee on public property, and the care and management of the street lights, under the direction of the street light committee. This superintendent should have the general management of these departments, as is done in other departments. If he is allowed proper authority, as contemplated in the ordinance, the result must be highly favorable to the city, and make the labor of these committees easier as well as more agreeable.

SEWERS.

The expenses of the sewer department were considerably reduced the past year, only \$1,375.15 having been expended by the city in building new sewers. This amount, together with the sum of \$7,521.36 contributed by the owners of the property drained, enabled us to build 5,776.8 feet of new sewers. This added to the 193,165

feet we already had makes 198,941.8, or 37.7 miles, as the total length of the sewers owned by the city at the present time, which have cost the city and the property owners about \$650,000, beside some \$30,000 expended for maintenance. The cost of maintenance in 1885 was \$5,360. Of this amount \$1,335 was for cleaning and dredging at the mouth of the Bridge Street sewer, in Cambridge. As our city is now well drained, it will probably not be necessary to increase the appropriation this year.

The Massachusetts Drainage Commission appointed to devise a plan for taking the sewage out of the Charles and Mystic rivers, are about to report to the Legislature the results of their labor. They have concluded to ask the Legislature to cause the large Boston sewer, which empties at Moon Island, to be extended to Waltham, on the southerly side of the Charles River, and to have a sewer built which would begin at a point near the outlet of our sewer, which empties into the Mystic River near the Park, and running down through Charlestown Neck, across the flats by the Asylum grounds to Cambridge; thence running up near the Charles River to a point above the Brookline Street bridge, where the sewage will be pumped across the river into the Boston sewer. This sewer is to take nearly all the sewage of Charlestown, Cambridge, and Somerville, and the cost of construction of the whole system is to be apportioned among the cities and towns benefited. The commission's estimate of Somerville's portion of the cost is \$250,000, and the annual assessment, to pay for pumping and maintenance, about \$8,000. The Alewife Brook sewage coming from Cambridge, Arlington, and Somerville is to be carried in another sewer along the brook to the Mystic Pumping Station, where it is to be pumped across the river into a large sewer which is to be built on the northerly side of the Mystic River. The cost to us of this part of the undertaking has not yet been estimated.

If the plans of the commission should be adopted, it would place a burden upon Somerville which would be very hard to bear, and which, it seems to me, the circumstances do not warrant. I do not feel that there is any danger to be apprehended by our citizens, or the citizens of the neighboring cities, from the sewage which now flows into the Mystic and Charles rivers. The time may come when it will be necessary to take the sewage out of those natural channels for drainage, but there is no necessity for immediate action. I advise opposition to all such legislation for the present,

and recommend that the City Council request the representatives from this city to do all in their power to postpone any such action. I would also recommend the employment of counsel to assist them in so doing. If the Legislature would oblige the cities and towns to abate the nuisances which now exist within their limits, in some of the tanneries, slaughter-houses, and rendering establishments, the atmosphere might be improved to such an extent as to justify the expenditure.

SCHOOLS.

The amount of money used in the support of schools and the care of school buildings, exclusive of amount required for new buildings, in 1885 was \$104,390, and the amount appropriated for new buildings, \$12,240, making the total cost of schools, \$116,630, a sum which seems to me too large. I have no doubt the cost of our schools can be reduced without impairing their efficiency. We now have twenty school buildings, containing one hundred and four school-rooms; we also hire two rooms. We have 105 public day schools, three evening grammar schools, and one evening drawing school. They are under the charge of 121 teachers. The average daily attendance for the year was 4,656 scholars, an increase of 122 over 1884. There is an urgent need of more school accommodations in Wards Three and Four. A new school building, containing at least four rooms, is very much needed in each of these wards. It is hoped you will be able to build them this year, as it must be evident to every one that we must continue to erect new buildings to provide for the rapidly increasing number of scholars. When we realize that nearly 500 new dwelling-houses have been erected in the city during the past two years, it must be apparent to every one that more schoolhouses are needed. I renew the recommendation of last year, which was to build large enough to not only provide for present needs but for future necessities. Make them double the size required at present, or in such a way that their capacity may be doubled at some future time. All school buildings containing more than two school-rooms should be built of brick, as brick buildings are not only more substantial and ornamental, but are safer and more economical in the end.

FIRE DEPARTMENT.

The apparatus in active service has not been increased during the past year. It consists of one steam fire engine, five hose carriages, and one hook and ladder truck. In addition to these we have a relief steamer, hook and ladder truck, and one relief hose carriage, all in good condition and well supplied with good serviceable hose. The manual force is the same as last year, namely:—

One engine and hose company, twelve men.

One hook and ladder company, fifteen men.

Four hose companies, eight men each, thirty-two men.

One chief of department.

One assistant engineer.

To some it would appear that the apparatus and force of this department are entirely too small for a city of 30,000 inhabitants; and while I think it is, it does not seem to be absolutely necessary to increase it at present. Our buildings for the most part are low, and fires are easily controlled. We have unlimited amount of water, which has sufficient force to be applied without the aid of power. It is hardly to be expected that we shall constantly maintain a department large enough to meet the possible contingency of a conflagration or even a fire in our largest establishments. It would be much cheaper to give the large manufactories extra protection by means of numerous hydrants and free and unlimited supply of water. It would be wise to set more hydrants throughout the city. If we cannot at present increase the apparatus, we can afford to increase the hydrants; only one new one was set last year. So important does this appear to me that I would recommend a separate appropriation for hydrants.

The cost of the fire department in 1885 was \$22,500.

THE POOR.

Agreeably with the recommendation made in a communication to the City Council one year ago, a change has been made in this department. An amendment to the city charter was procured, so as to provide for a board of four members— one from each ward — to serve without pay for four years, the term of office of one of them to expire each year, and which allows the board to elect such

subordinate officers outside of their number as they deem necessary, and to establish such rules and regulations as they see fit for the management of the business. The salaries of such subordinate officers are fixed by the City Council. Among the advantages of this plan are the following: The Board has a subordinate officer who is on duty at all times, ready to receive applications and render prompt aid when necessary; immediate investigation of all cases is made, and all aid rendered under the direction of the Board; no one is allowed to suffer, and no one receives assistance unless they are entitled to it. It will be seen that the change was made in the interest of humanity, and the short experience we have had proves it to have been in the interest of economy, as considerable money has been saved already, and there is no doubt but the change was a good one.

The Board earnestly recommended the erection of an almshouse, and it will be your duty to carefully consider the recommendation. With an almshouse the business of the department could be much more easily and pleasantly conducted, and some of the paupers would have a better and more comfortable home than can now be procured for them. Whether the department can be run with less money or not is a matter upon which there is some doubt. Whether it is best under the circumstances to erect an almshouse this year or not is for you to determine. It is hoped you will give the matter your early attention. If one is to be provided, I would recommend that it be placed on the lot at the corner of Cedar Street and Broadway, known as the city farm, not only because the city owns the land, but because it is the proper place for it, and it is in a convenient locality. I would also recommend that a small portion of said lot be set off and devoted to the use of the poor department for a burial ground, to satisfy the request of the Overseers, which I think should be granted.

PUBLIC LIBRARY.

The appropriation in 1885 was \$2,500, and the amount received from dog licenses, \$1,402, making in all, \$3,902. This amount was expended principally for new books and in the payment of salaries of the librarian and her assistants. The whole number of books now in the library is 12,134, an increase since last January of 937. The library is well patronized, and contributes largely to

the education and happiness of the people. During the year the new library building was completed and occupied. It is an elegant and substantial building, and cost \$28,338.45. It is expected that under the management of its very efficient board of trustees it will increase in usefulness. It should be liberally supported.

CITY HALL.

An appropriation of \$5,000 was made last year with which to alter and improve the City Hall, in order to make use of the room vacated by the Public Library and provide suitable vaults and improved accommodations for the city officers. In accordance with the plans adopted by the City Council, the lower story of the building was altered; new and roomy vaults were built, one for the treasurer and one for the assessors; the city clerk's vault was enlarged; the partitions were changed in such a way as to give each office and committee-room sufficient accommodation, good light, and everything to make them pleasant and the work of the officer easy, and the whole lower story was refinished in hard wood and refurnished in an elegant manner, so as to make them compare favorably with the offices of a similar kind in other cities. New windows were put in throughout the building. The work of completing the improvement by refinishing the upper story to correspond with the lower one can be done at a small expense, as no change would be required in the partitions, no new vaults, no new windows and floors, and but a small portion of the plastering removed. I would therefore recommend that an appropriation be made this year sufficient to complete the improvement. The cost of the whole change in the building will be scarcely more than the annual interest on the cost of a new building, and it will then be good enough and large enough to accommodate the city's business for many years to come. I believe the whole plan an economical one, for the reason that it will be likely to postpone for many years the building of a new city hall.

POLICE.

The police force consists of a chief, captain, three sergeants, and twenty patrolmen.

It is evident that this force is not large enough to prevent crime.

It cannot be expected that our property can be protected and our buildings watched so constantly that burglaries will never be committed or other crimes perpetrated ; neither would it be good policy to increase the force to such an extent as would make us reasonably sure that no crime would be committed, as the city is not able to maintain such a force, but the force should be composed of men who are able to detect crime and bring the criminals to justice. Our police, as usual, have been remarkably successful in this direction during the past year ; and, while we have not as many patrolmen as I think we ought to have. I am happy to say the city has not as yet suffered in consequence.

The department cost the city \$23,000 last year, beside the care of the Police building.

WATER CONTRACT.

The question of obtaining a new contract with the City of Boston for the supply of Mystic water has occupied much of the attention of the authorities during the past year. The recommendations contained in the inaugural address of last year were referred to the Water Board, and the members of that board have taken a very active interest in the matter and spent a great deal of time in their efforts to bring about the desired result. They have been so far successful as to convince the members of the Boston Water Board that we are entitled to a more liberal contract, as it appears, for they have asked of their City Council for the necessary authority to make a new contract with us on the basis suggested by our city. The terms of the new contract would be substantially the same as those of the old one, except that under the new one Boston would pay to Somerville one half of the amount paid by the water takers of our city, instead of the graduated scale of fifteen, twenty, twenty five, thirty, and forty per cent, as at present. Owing to the trouble and change in the Boston Water Board, the question of a new contract was not submitted to the Boston City Council until very late in the season. For this reason, at the last meeting of their City Council the matter was referred to the next city government. So just is our claim, and so favorable the action of the Boston Water Board, that we feel that our request will soon be granted.

SUITS AT LAW.

There are now pending nine cases to which the city is a party, none of which appear to be very important. During the past year five cases have been disposed of. Two verdicts have been rendered against the city. One was the case of *Kendall v. Somerville* for personal injuries from falling on the sidewalk; the verdict was \$1,048.18. and costs of court, \$59.91, in all \$1,108.09. The other was the Stepp case, which was an action for personal injuries received from falling into a sewer trench; verdict, \$579.85; costs, \$137.69; in all \$717.59. The other three cases were decided in favor of the city.

There have been twelve petitions presented to the City Council for damages, personal or otherwise, which have been disposed of as follows: Upon five of them the City Council voted no action necessary; in five of them the petitioners were given leave to withdraw; and in the remaining two the claims were referred to the city solicitor, as suits had at the time of reference been brought against the city. Five of them were for personal injuries, two related to matters of taxation, and the remaining three were for grade damages. One case was settled without reference to the City Council.

WATERING STREETS.

The usual appropriation (\$3,000) was made for street watering the past year. This amount seems to be all the city can afford to apply to this purpose, and it is quite sufficient to keep the carts owned by the city in constant use. Without an increase in the number of carts no more money could be used. It is my belief that the property owners should contribute a larger portion of the cost of watering the streets.

WATER MAINTENANCE.

Owing to the change made by the Water Board in substituting iron pipe for cement pipe, a larger appropriation than usual was required in this department. Nearly one half of the sum appropriated (\$21,200) was used in the purchase of a supply of pipe of various sizes, not all of which has yet been used. Some sizes have been used more than others, and will need to be replenished

the coming year. Although not so large an outlay for new pipe will be required as last year, consequently not so large an appropriation will be absolutely necessary; at the same time, all of the money which can be spared can be used to good advantage in this department.

There seems to be some difference of opinion as to the policy of substituting iron for cement pipe, but where there is so great a pressure of water, experts seem to be unanimous in the opinion that it is good economy to do so.

CONCLUSION.

Gentlemen of the City Council: In closing this address it seems proper for me to introduce a word of caution or advice. Do not pledge yourselves to support any measure until you have heard the arguments which may be produced against it. While it is necessary and expected of you to understand and be governed somewhat by public sentiment, it is usually safer to consult with your associates in the City Council than to take advice of interested parties outside your number. Members of the City Council certainly ought to know better than private individuals, who usually have some private interest at stake, what they ought to do and what they can afford to do. Outside influence usually favors getting something new rather than the taking care of that which we already have. Your own sense of justice and propriety will be your safest guide. Notwithstanding the present necessity of keeping down the rate of taxation and curtailing expenses, Somerville is destined, in my opinion, to become one of the most prosperous cities in the Commonwealth. It cannot help being prosperous, in a financial point of view, from the fact that we have no expensive improvements to make, unless it be to take care of the sewage to which reference has been made; we have no bridges to build or maintain of any consequence, as most cities have; no ferries to support, and, in fact, no very great expenses to meet, except to maintain our regular departments and support the poor. For years we have been laboring under the disadvantage of a large debt, but it must be remembered that for ten years we have been rapidly reducing it instead of increasing it, and at the rate it is being reduced at the present time we shall be in a few short years free from it entirely. While we are reducing the debt at the present rate, it

will be necessary to keep the expenses down to the lowest possible limit consistent with the growth and prosperity of the city. It is fortunate indeed for us that we have the law to assist us.

I hope, gentlemen, to have the assistance and hearty co-operation of each and all of you in conducting the affairs of our city in such a way as will meet the approval of all the citizens and give entire satisfaction to ourselves. He who conducts public business for the benefit of all the people, merits, and generally receives, the approval of all men.

REPORT
OF THE
TREASURER AND COLLECTOR OF TAXES.

CITY OF SOMERVILLE.

IN BOARD OF ALDERMEN, Jan. 26, 1887.

Referred to the committee on finance, and sent down for concurrence.

GEO. I. VINCENT, *Clerk pro. tem.*

IN COMMON COUNCIL, Jan. 27, 1887.

Concurred in.

DOUGLAS FRAZAR, *Clerk.*

IN COMMITTEE ON FINANCE, Feb. 10, 1887.

*To the City Council of Somerville:—*The committee on finance, to which was referred the annual report of the treasurer and collector of taxes for the year 1886, reports that his books and vouchers have been examined by this committee and the auditor, and have been compared with the auditor's book, and with the statements received from the several committees, boards and officers of the city, in accordance with ordinance, and no errors appear in his accounts, which are kept in a very intelligible and businesslike manner, and agree with his report. We have also verified his cash balance by actual count, and by visiting the banks of deposit; and it is hereby recommended that the report be accepted and printed in the annual reports.

MARK F. BURNS,	} <i>Committee.</i>
CHARLES L. NORTH,	
EDWARD H. BRADSHAW,	
GEO. D. WEMYSS,	
EZRA D. SOUTHER,	

IN BOARD OF MAYOR AND ALDERMEN, Feb. 23, 1887.

Accepted and referred to the committee on printing, to be printed in the annual reports. Sent down for concurrence.

CHARLES E. GILMAN, *Clerk.*

IN COMMON COUNCIL, Feb. 24, 1887.

Concurred in.

DOUGLAS FRAZAR, *Clerk.*

CITY OF SOMERVILLE.

TREASURER'S OFFICE, Jan. 20, 1887.

To the Honorable the Mayor and City Council of the City of Somerville :

GENTLEMEN, — The undersigned presents herewith the fifteenth annual report of the financial condition of the city, and a statement showing in detail the receipts and disbursements of the several departments for the year ending Dec. 31, 1886.

The value of the property of the city Dec. 31, 1885, as appears by the schedule published with the last annual reports, was \$1,234,926.64 ; and the additions thereto were for amounts expended on the schoolhouses now in the course of construction in Wards Three and Four, viz. : —

On Bingham Schoolhouse (Lowell Street)	\$7,831 74
On Burns Schoolhouse (Cherry Street)	7,683 32

making the value of the public property, Dec. 31, 1886, as per Table A, \$1,250,441.70.

The funded debt of the city stands the same as at the close of last year, viz., \$1,525,000.

City-loan Bonds, Nos. 175 to 182	\$40,000 00
“ “ “ 183 to 185	15,000 00
“ “ No. 186	5,000 00
“ “ “ 187	1,000 00
Water-loan bonds, Nos. 23 to 27	50,000 00
“ “ No. 28	5,500 00
Amounting to	<u>\$116,500 00</u>

bearing interest at five and one half per cent, became due during the year, and were provided for by the issue of

City-loan Bond, No. 883	\$1,000 00
“ “ “ 884	60,000 00
Water-loan Bond, No. 228	7,500 00
	<hr/>
Amounting to	\$68,500 00

bearing interest at five per cent, which were purchased by the commissioners of the sinking fund at par; and

Water-loan Bonds, Nos. 229 to 238	\$10,000 00
“ “ Nos. 239 to 256	18,000 00
“ “ Nos. 257 to 266	10,000 00
“ “ Nos. 267 to 276	10,000 00
	<hr/>
Amounting to	\$48,000 00

bearing interest at four per cent per annum, sold in open market at a premium of \$8.53, amounting to \$4,094.40, making the total amount of the bonds issued \$116,500.

To provide for the payment of the State and county taxes, and for the current expenses of the city, the assessors' warrant was received for the tax levy on a valuation on real estate of \$24,124,700; valuation on personal property, \$1,878,500; making the total valuation \$26,003,200, at a rate of \$15.40 on \$1,000 valuation, and 8,269 polls at \$2 each, amounting to \$416,987.28.

To this amount is added the sum standing to the credit of excess and deficiency account, being the amount of unexpended appropriations Jan. 1, 1886, \$8,054.98; the amount received from the City of Boston for returns on water contract, \$21,444.91; and the additional credits received from all other sources by the various departments, amounting to \$45,780 75; making the total amount of resources for the year 1886, \$492,267.92.

The appropriations for the year provided for by the tax levy, the amounts transferred from other resources of the city, the additional amounts credited, the amounts expended, and the unexpended balances of the various accounts were as follows: —

REPORT OF TREASURER AND COLLECTOR OF TAXES. 35

Accounts.	Appropriations.	Additional Credits.	Expenditures and Balances.
Broadway Park Maintenance: —			
Appropriation	\$1,000 00		
Received for hay sold		\$10 05	
Expenditures			\$932 29
Unexpended balance			77 76
Fire Department: —			
Appropriation	24,000 00		
Received for old materials		89 50	
Expenditures			24,057 03
Unexpended balance			32 47
Health Department: —			
Appropriation	3,500 00		
Received for permits, licenses, etc.		303 00	
Expenditures			3,538 64
Unexpended balance			214 36
Highways: —			
Appropriation	\$32,000 00		
Transferred from Interest account	200 00		
	<hr/>		
	32,200 00		
Received for labor and materials		2,673 61	
Expenditures			34,792 26
Unexpended balance			81 35
Indigent Soldiers and Sailors: —			
Appropriation	600 00		
Received from State of Massachusetts		463 00	
Expenditures			926 00
Unexpended balance			137 00
Interest: —			
Appropriation	\$55,000 00		
Transferred to other accounts	8,902 73		
	<hr/>		
	46,097 27		
Received interest, corporation and bank taxes, etc.		23,666 42	
Expended			62,428 33
Unexpended balance			7,335 36
Miscellaneous: —			
Transferred from excess and deficiency account	8,054 98		
Received for costs on taxes, licenses, etc.		1,749 65	
Expenditures			8,452 68
Unexpended balance			1,351 95

Accounts.	Appropriations.	Additional Credits.	Expenditures and Balances.
New Fire Hydrants : —			
Appropriation	\$1,000 00		
Expenditures			\$995 84
Unexpended balance			4 16
Police : —			
Appropriation	\$23,500 00		
Transferred from interest account	231 38		
	<u>23,731 38</u>		
Received for court fees, fines, etc.,		\$2,596 05	
Expenditures			26,327 43
Police Station Incidentals : —			
Appropriation	\$1,500 00		
Transferred from interest account	300 00		
	<u>1,800 00</u>		
Received for rent of hall, etc.		418 33	
Expenditures			1,950 51
Unexpended balance			267 82
Public Library : —			
Appropriation	\$2,500 00		
Transferred from interest account	409 73		
	<u>2,909 73</u>		
Received for dog licenses, etc.		2,443 63	
Expenditures			5,353 36
Printing and Stationery : —			
Appropriation	3,000 00		
Received for advertising		3 00	
Expenditures			2,773 43
Unexpended balance			229 57
Public Library Building : —			
Balance from 1885		311 55	
Expenditures			258 75
Unexpended balance			52 80
Salaries : —			
Appropriation	\$21,900 00		
Transferred from interest account	377 40		
	<u>22,277 40</u>		
Expenditures			22,277 40
School Contingent : —			
Appropriation	\$13,000 00		
Transferred from interest account	695 58		
	<u>12,695 58</u>		

REPORT OF TREASURER AND COLLECTOR OF TAXES. 37

Accounts.	Appropriations.	Additional Credits.	Expenditures and Balances.
Received for tuition of non-resident pupils, etc. . . .		\$298 56	
Expenditures			\$13,994 14
School Fuel : —			
Appropriation	\$5,200 00		
Expenditures			4,928 94
Unexpended balance			271 06
Schoolhouse Incidentals : —			
Appropriation	\$8,000 00		
Transferred from interest account			705 92
	8,705 92		
Received for old iron sold		26 57	
Expenditures			8,732 49
School Teachers' Salaries : —			
Appropriation	\$76,000 00		
Transferred from interest account			4,942 26
	80,942 26		
Expenditures			80,942 26
Schoolhouse in Ward Three : —			
Appropriation	\$8,500 00		
Expenditures			7,831 74
Balance to be expended in 1887			668 26
Schoolhouse in Ward Four : —			
Appropriation	\$8,500 00		
Expenditures			7,633 32
Balance to be expended in 1887			816 68
Sewers : —			
Appropriation	\$8,000 00		
Received for permits, etc. . . .		175 05	
Expenditures			7,665 54
Unexpended balance			509 51
Sidewalks : —			
Appropriation	\$4,000 00		
Expenditures			3,631 62
Unexpended balance			368 38
Sinking Fund Contributions : —			
Appropriation	\$40,725 00		
Expenditures			40,725 00
Street Lights : —			
Appropriation	\$9,500 00		
Received for lamp-posts, etc. . . .		409 98	
Expenditures			8,862 37
Unexpended balance			1,047 61

Accounts.	Appropriations.	Additional Credits.	Expenditures and Balances.
Support of Poor : —			
Appropriation	\$15,000 00		
Received for support of paupers		\$2,481 77	
Expenditures			\$14,341 83
Unexpended balance			3,139 94
Watering Streets : —			
Appropriation	\$3,000 00		
Transferred from interest account	40 46		
	<u>\$3,040 46</u>		
Received from abutters		4,891 26	
Expenditures			7,931 72
Water Maintenance : —			
Appropriation	\$14,000 00		
Transferred from interest account	1,000 00		
	<u>15,000 00</u>		
Received for labor, materials, etc.		2,769 77	
Expenditures			16,885 05
Unexpended balance			884 72
Water Loan Interest : —			
Received from City of Boston for return on water rates		21,444 91	
Expended			16,571 15
Unexpended balance			4,873 76
County of Middlesex, County Tax : —			
Appropriation	12,076 37		
Expended			12,076 37
State of Massachusetts, State Tax : —			
Appropriation	20,085 00		
Expended			20,085 00
Overlay and Abatement : —			
Appropriation	1,900 91		
Applied and to be applied to abatements on taxes			1,900 91
<hr/>			
Appropriations as per tax levy	\$416,987 28		
Excess and deficiency, Jan. 1, 1886, "Water loan interest" received from city of Boston	8,054 98		
Additional credits from various sources	21,444 91		
Expenditures	45,780 75		
Excess of appropriations over current expenses			\$471,388 34
			20,879 58
Total	<u>\$492,267 92</u>		<u>\$492,267 92</u>

The assets of the city available for the payment of its unfunded liabilities are as follows: —

Taxes	\$151,595 42
Real-estate liens	728 10
State of Massachusetts, State aid	3,560 00
State of Massachusetts, indigent soldiers and sailors	451 00
Highway betterment assessments	987 24
Sidewalk assessments	3,446 97
Sewer assessments	6,467 86
Water service assessments	916 92
Cash	9,579 75
	<hr/>
Total amount of available assets	\$177,733 26

The unfunded liabilities are: —

Temporary loans	\$150,000 00
Overlay and abatement account	3,903 34
Overplus on tax sales	233 96
Sundry persons	1,231 44
Schoolhouse in Ward Three	668 26
Schoolhouse in Ward Four	816 68
	<hr/>
Total amount of unfunded liabilities	\$156,853 68
Excess of available assets over unfunded liabilities	20,879 58
	<hr/>
	\$177,733 26
	<hr/> <hr/>

The financial condition of the city, exclusive of its public property, is as follows: —

Funded debt	\$1,525,000 00
Amount of sinking funds	584,052 41
	<hr/>
Net amount of funded debt	\$940,947 59
Excess of available assets over unfunded liabilities	20,879 58
	<hr/>
Leaving a net indebtedness, Dec. 31, 1886, of	\$920,068 01

Total cash receipts for the year, including a balance of \$8,075.76 from the year 1885, were	\$1,116,820 28
Total cash disbursements	1,107,240 53
	<hr/>
Leaving in the treasury the sum of	\$9,579 75

A detailed statement of the public property, funded debt, and the receipts and disbursements of the various accounts, will be found in the appendix following this report.

Respectfully submitted,

JOHN F. COLE, *Treasurer.*

APPENDIX TO TREASURER AND COLLECTOR'S
REPORT.

TABLE A.

PUBLIC PROPERTY, DEC. 31, 1886.

Central Hill land (12 acres, 27,920 feet)	\$100,000	00
City Hall	\$10,000	00
Furniture	3,000	00
		13,000 00
Public Library	8,500	00
Public Library building	28,338	45
Steam fire-engine house	\$10,000	00
Furniture	500	00
Steam fire-engine and apparatus,	4,000	00
Steam fire-engine, hose-carriage,		
and apparatus	2,000	00
		16,500 00
High Schoolhouse	\$40,000	00
Furniture	3,500	00
Philosophical apparatus	500	00
		44,000 00
Prescott Schoolhouse, land (21,444		
feet) and building	\$40,000	00
Furniture	2,000	00
		42,000 00
Luther V. Bell Schoolhouse, land		
(23,396 feet) and building	\$40,000	00
Furniture	3,000	00
		43,000 00
<i>Amount carried forward</i>		\$295,338 45

<i>Amount brought forward</i>			\$295,338 45
Forster Schoolhouse, land (27,499 feet) and building	\$37,922 24		
Furniture	1,500 00		
			<hr/> 39,422 24
Morse Schoolhouse, land (29,109 feet) and building	\$25,000 00		
Furniture	1,000 00		
			<hr/> 26,000 00
Highland Schoolhouse, land (23,260 feet) and building	\$32,000 00		
Furniture	1,000 00		
			<hr/> 33,000 00
Lincoln Schoolhouse, land (17,662 feet) and building	\$14,742 17		
Furniture	744 93		
			<hr/> 15,487 10
Prospect Hill Schoolhouse, land (25,313 feet) and building	\$20,000 00		
Furniture	600 00		
			<hr/> 20,600 00
Jackson Schoolhouse, land (11,212 feet) and building	\$8,000 00		
Furniture	300 00		
			<hr/> 8,300 00
Bennett Schoolhouse, land (20,560 feet) and building	\$8,000 00		
Furniture	300 00		
			<hr/> 8,300 00
Webster Schoolhouse, land (11,050 feet) and building	\$8,000 00		
Furniture	300 00		
			<hr/> 8,300 00
Union Schoolhouse, land (9,360 feet) and building	\$2,500 00		
Furniture	100 00		
			<hr/> 2,600 00
Harvard School, land (9,810 feet) and building	\$2,500 00		
Furniture	100 00		
			<hr/> 2,600 00
<i>Amount carried forward</i>			<hr/> <hr/> \$459,947 79

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 43

<i>Amount brought forward</i>		\$459,947 79	
Edgerly Schoolhouse, land (26,428 feet) and building	\$25,000 00		
Furniture	500 00		
	<hr/>		25,500 00
Edgerly Schoolhouse, addition	\$17,000 00		
Furniture	600 00		
	<hr/>		17,600 00
Brastow Schoolhouse, land (10,019 feet) and building	\$6,000 00		
Furniture	250 00		
	<hr/>		6,250 00
Franklin Schoolhouse, land (33,017 feet) and building	\$14,000 00		
Furniture	300 00		
	<hr/>		14,300 00
Beach Street Schoolhouse, land (6,000 feet) and building	\$4,500 00		
Furniture	250 00		
	<hr/>		4,750 00
Spring Hill Schoolhouse, land (4,991 feet) and building	\$1,600 00		
Furniture	100 00		
	<hr/>		1,700 00
Davis Schoolhouse, Tufts Street, land (29,584 feet) and building	\$17,606 22		
Furniture	726 99		
	<hr/>		18,333 21
Cummings Schoolhouse, School Street, land (11,300 feet) and building	\$14,643 21		
Furniture	714 16		
	<hr/>		15,357 37
Bingham Schoolhouse, Lowell Street, land (21,017 feet) and building, unfinished			7,831 74
Burns Schoolhouse, Cherry Street, land (16,080 feet) and building, unfinished			7,683 32
			<hr/>
<i>Amount carried forward</i>			\$579,253 43

<i>Amount brought forward</i>		\$579,253 43
City farm, land (10 acres, 12,523 feet)		30,000 00
Cedar Street Schoolhouse	\$700 00	
Furniture	100 00	
	<hr/>	800 00
City stables and dwelling-houses		7,000 00
Equipments for highway repairs		3,000 00
Watering-carts and sheds		2,300 00
No. 1 Hose-house, land (4,312 feet) and building	\$2,300 00	
Furniture	400 00	
John E. Wool hose-carriage and apparatus	2,000 00	
	<hr/>	4,700 00
No. 2 Hose-house, land (5,400 feet) and building	\$7,500 00	
Furniture	300 00	
Winter Hill hose-carriage and apparatus	2,000 00	
	<hr/>	9,800 00
No. 3 Hose-house, land (5,226 feet) and building	\$9,000 00	
Furniture	300 00	
George H. Foster hose-carriage and apparatus	2,000 00	
R. A. Vinal hook-and-ladder truck and apparatus	3,400 00	
Prescott hook-and-ladder truck and apparatus	100 00	
	<hr/>	14,800 00
No. 4 Hose-house, land (9,100 feet) and building	\$11,000 00	
Furniture	400 00	
George O. Brastow hose-carriage and apparatus	2,000 00	
Relief hose-carriage	600 00	
	<hr/>	14,000 00
<i>Amount carried forward</i>		\$665,653 43

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 45

<i>Amount brought forward</i>	\$665,653 43
Fire-alarm telegraph	15,800 00
Police-station, land (15,232 feet)	
and building (Bow Street)	\$40,000 00
Furniture	3,000 00
	43,000 00
Prospect Street, land (7,918 feet) and building	7,000 00
Public park (cost \$212,993.20)	125,000 00
Joy Street, land (2,960 feet)	500 00
Walnut Hill, land (10,890 feet)	1,000 00
Elm Street, land (18,000 feet)	3,600 00
Ledge-land on Bond Street (39,732 feet)	2,500 00
Holland Street (5 acres, 6,806 feet)	12,000 00
Somerville Avenue (39,456 feet)	5,000 00
Gravel-land in Waltham (about 35 acres)	15,000 00
Gravel-land in Wakefield (about 1½ acres)	5,000 00
Gravel-land in Winchester (about 2 acres)	500 00
Somerville water-works (cost \$342,608.76)	341,000 00
Oliver Street, land (63,069 feet)	7,500 00
Whipple Street, land, lots Nos. 30 and 31 (15,240 feet)	388 27
	Total value of public property
	\$1,250,441 70

TABLE B
FUNDED DEBT, DEC. 31, 1886.

Date.	Loan.	Number of Bonds.	Rate per cent of Interest.	When due.	Denomination.	Amount.
1882.				1887.		
July 1,	City,	423 to 437,	5	July 1,	\$1,000	\$15,000
" "	"	438,	"	" "	500	500
1880.						
Oct. 1,	Water,	37 to 45,	"	Oct. 1,	1,000	9,000
1881.						
April 1,	City,	373 to 412,	"	" "	1,000	40,000
Oct. 1,	"	416,	"	" "	500	500
" "	"	417 to 422,	"	" "	1,000	6,000
1882.				1888.		
July 1,	"	439 to 461,	"	July 1,	1,000	23,000
1884.						
Oct. 1,	"	467 to 507,	4	Oct. 1,	1,000	41 000
1881.						
Jan. 1,	Water,	57 to 65,	5	Jan. 1,	1,000	9,000
1880.						
Oct. 1,	"	46 to 54,	"	Oct. 1,	1,000	9,000
1884.						
Oct. 1,	City,	508 to 575,	4	" "	1,000	68,000
1880.						
Oct. 1,	Water,	55,	5	Oct. 1,	9,000	9,000
1884.						
Oct. 1,	City,	576 to 646,	4	" "	1,000	71,000
" "						
" "	"	647 to 720,	"	Oct. 1,	1,000	74,000
1881.						
Jan. 1,	Water,	66 to 76,	5	Jan. 1,	1,000	11,000
Oct. 1,	"	78 to 88,	"	Oct. 1,	1,000	11,000
1884.						
Oct. 1,	City,	721 to 798,	4	" "	1,000	78,000
1885.						
July 1,	"	856 to 880,	"	July 1,	1,000	25,000
Oct. 1,	Water,	89 to 99,	5	Oct. 1,	1,000	11,000
1884.						
Oct. 1,	City,	799 to 852,	4	" "	1,000	54,000.
1881.						
Oct. 1,	Water,	100 to 111,	5	Oct. 1,	1,000	12 000
1878.						
Jan. 1,	City.	335,	"	Jan. 1,	37,000	37,000
" "	"	336,	"	" "	1,000	1,000
" "	"	338,	"	" "	2,000	2,000
1879.						
Jan. 1,	Water,	34,	"	" "	25,000	25,000
" "	City,	339,	"	" "	12,000	12,000
" "	"	340,	"	" "	1,500	1,500
" "	"	341,	"	" "	1,500	1,500
	<i>Amount</i>	<i>carried forward</i>				\$657,000

TABLE B—Continued.

Date.	Loan.	Number of Bonds.	Rate per cent of Interest.	When due.	Denomination.	Amount.
	<i>Amount</i>	<i>brought forward</i>				\$657,000
1880.				1895.		
Jan. 1,	City,	346,	5	Jan. 1	\$2,000	2,000
" "	"	347,	"	" "	1 000	1,000
" "	"	348,	"	" "	5,500	5,500
1885.						
July 1,	"	881,	"	" "	54,000	54,000
" "	"	882,	"	" "	1 500	1,500
1876.						
April 1,	"	189,	5½	April 1,	35,500	35,500
Oct. 1	"	190 to 194,	5	" "	5,000	25,000
" "	"	195 to 334,	"	" "	1,000	140,000
1879.						
April 1,	"	343,	"	" "	4,000	4,000
Oct. 1,	"	344,	"	" "	8,000	8,000
" "	"	345,	"	" "	25,000	25,000
1880.						
Oct. 1,	"	351,	"	" "	1,000	1,000
" "	"	352,	"	" "	42,500	42,500
1881.						
Oct. 1,	"	414,	"	" "	45,000	45,000
" "	"	415,	"	" "	1,000	1,000
1882.						
Oct. 2,	"	463,	"	" "	45,000	45,000
" "	"	464,	"	" "	2,000	2,000
1883.						
Oct. 1,	"	466,	"	" "	50,000	50,000
1884.						
Oct. 1,	"	854,	"	" "	52,000	52,000
" "	"	855,	"	" "	3,000	3,000
1886.						
April 1,	"	883,	"	" "	1,000	1,000
Oct. 1,	"	884,	"	" "	60,000	60,000
1883.						
July 1,	Water,	112 to 124,	"	July 1,	1,000	13,000
1876.				1896.		
July 1,	Sewer,	1 to 7,	"	July 1,	5,000	35,000
1882.						
July 1,	Water,	125 to 136,	"	" "	1,000	12,000
" "	"	137,	"	" "	500	500
" "	"	138 to 151,	"	1897.		
" "	"	152 to 166,	"	July 1,	1,000	14,000
" "	"		"	1898.		
" "	"		"	July 1,	1,000	15,000
" "	Water,	167 to 181,	"	1899.		
" "	"	182,	"	July 1,	1,000	15,000
" "	"		"	" "	500	500
" "	"	183 to 194,	"	1900.		
" "	"		"	July 1,	1,000	12,000
	<i>Amount</i>	<i>carried forward</i>				\$1,378,000

TABLE B — *Concluded.*

Date.	Loan.	Number of Bonds.	Rate per cent of Interest.	When due.	Denomination.	Amount.
1882.	<i>Amount brought forward.</i>					\$1,378,000
July 1, 1884.	Water,	195,	5	1900. July 1,	\$500	500
Oct. 1,	"	200 to 202,	4	Oct. 1, 1901.	1,000	3,000
" " 1885.	"	203 to 212,	"	Oct. 1,	1,000	10,000
July 1,	"	214 to 219,	"	July 1, 1902.	1,000	6,000
" " 1886.	"	220 to 226,	"	July 1,	1,000	7,000
July 1,	"	229 to 238,	"	" " 1903.	1,000	10,000
" " 1877.	"	239 to 256,	"	July 1, 1904.	1,000	18,000
Oct. 1, 1879.	"	257 to 266,	"	July 1.	1,000	10,000
Jan. 1, 1885.	"	33,	5	Oct. 1, 1905.	5,000	5,000
July 1, 1876.	"	35,	"	Jan. 1,	5,000	5,000
April 1, 1880.	"	227,	"	" " 1906.	7,000	7,000
Oct. 1, 1881.	"	29,	5½	April 1,	4,500	4,500
Oct. 1, 1882.	"	56,	5	" " 1907.	5,500	5,500
Oct. 2, 1883.	"	77,	"	" " 1908.	6,000	6,000
Oct. 1, 1884.	"	196,	"	" " 1909.	6,500	6,500
" " 1885.	"	197,	"	" " 1910.	1,000	1,000
Oct. 1, 1886.	"	198,	"	" " 1911.	6,500	6,500
April 1, 1876.	"	199,	"	" " 1912.	1,000	1,000
July 1, 1886.	"	213,	"	" " 1913.	7,000	7,000
July 1, 1886.	"	228,	"	" " 1914.	7,500	7,500
July 1, 1886.	"	30 and 31,	5½	July 1, 1907.	5,000	10,000
July 1, 1886.	"	267 to 276,	4	July 1,	1,000	10,000
	<i>Total Funded Debt</i>					\$1,525,000

TABLE C.

STATEMENT OF ACCOUNTS, SHOWING APPROPRIATIONS,
EXPENDITURES, ETC., TO DEC. 31, 1886.

APPROPRIATIONS.

CREDIT.

Taxes, amount assessed for current expenses	\$382,925 00
Property and debt balance	116,500 00
	<hr/>
	\$499,425 00

DEBIT.

Broadway Park maintenance	\$1,000 00
Fire Department	24,000 00
Health Department	3,500 00
Highways	32,000 00
Indigent soldiers and sailors	600 00
Interest	55,000 00
New fire hydrants	1,000 00
Police	23,500 00
Police station incidentals	1,500 00
Public Library	2,500 00
Printing and stationery	3,000 00
Salaries	21,900 00
School contingent	13,000 00
School fuel	5,200 00
Schoolhouse incidentals	8,000 00
School teachers' salaries	76,000 00
Schoolhouse in Ward Three	8,500 00
Schoolhouse in Ward Four	8,500 00
Sewers	8,000 00
Sidewalks	4,000 00
Sinking fund contributions	40,725 00
Street lights	9,500 00
Support of poor	15,000 00
Watering streets	3,000 00
Water maintenance	14,000 00
Renewals of funded debt	116,500 00
	<hr/>
	\$499,425 00

CASH.	CREDIT.
Broadway Park maintenance	\$932 29
County of Middlesex	12,076 37
Fire Department	24,057 03
Funded debt	116,500 00
Health Department	3,588 64
Highways	34,792 26
Indigent soldiers and sailors	926 00
Interest	62,328 33
Miscellaneous	8,452 68
New fire hydrants	995 84
Police	26,327 43
Police station incidentals	1,950 51
Printing and stationery	2,773 43
Public Library	5,353 36
Public Library building	258 75
Salaries	22,277 40
School contingent	13,994 14
School fuel	4,928 94
Schoolhouse incidentals	8,732 49
School teachers' salaries	80,942 26
Schoolhouse in Ward Three	7,831 74
Schoolhouse in Ward Four	7,683 32
Sewers	16,401 61
Sidewalks	7,229 94
Street lights	8,862 37
Support of poor	14,341 83
Sinking fund contributions	40,725 00
State of Massachusetts	20,085 00
State aid	3,709 00
Sundry persons	87 50
Temporary loans	500,000 00
Watering streets	7,931 72
Water maintenance	16,885 05
Water services	6,235 55
Overplus on tax sales	504 10
	<hr/>
<i>Amount carried forward</i>	<i>\$1,090,701 88</i>

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 51

<i>Amount brought forward</i>	\$1,090,701 88
Water-loan interest	16,538 65
Balance to debit in account 1887	9,579 75
	<hr/>
	\$1,116,820 28

DEBIT.

Balance	\$8,075 76
Broadway Park maintenance	10 05
Funded debt	116,500 00
Fire Department	89 50
Health Department	303 00
Highways	2,673 61
Highway betterment assessments	2,860 87
Interest	23,652 95
Miscellaneous	1,702 55
Overplus on tax sales	635 93
Police	2,596 05
Police station incidentals	418 33
Public Library	2,041 03
Printing and stationery	3 00
Real-estate liens	30 79
School contingent	298 56
Schoolhouse incidentals	26 57
Sewers	175 05
Street lights	409 98
Support of poor	2,481 77
State of Massachusetts, State aid	3,717 00
State of Massachusetts, indigent soldiers and sailors	494 00
Sidewalk assessments	1,610 42
Sewer assessments	7,771 42
Taxes	427,531 54
Temporary loans	475,000 00
Water maintenance	2,666 83
Water services	818 28
Water-service assessments	5,889 27
Watering streets	4,891 26
Water-loan interest	21,444 91
	<hr/>
	\$1,116,820 28

BROADWAY PARK MAINTENANCE.

CREDIT.

Appropriations, amount assessed	\$1,000 00
Cash, received of R. W. Baldwin, for hay	10 05
	<hr/>
	\$1,010 05

DEBIT.

Cash, paid Joseph Breck & Sons, repairing lawn mowers, etc.	\$25 80
F. Dooris, repairing lawn mower	50
J. A. Durrell, hardware	6 31
H. W. Raymond, hardware	6 71
Hugh A. Carney, plants	30 00
E. R. Perham, expressing	2 50
Dennis Foley, lighting lamps	13 00
Highways account, labor, teaming, etc.	847 47
	<hr/>
	\$932 29
Excess and deficiency, balance to credit of account	77 76
	<hr/>
	\$1,010 05

COUNTY OF MIDDLESEX.

CREDIT.

Taxes, amount assessed	\$12,076 37
----------------------------------	-------------

DEBIT.

Cash, paid county tax	\$12,076 37
---------------------------------	-------------

EXCESS AND DEFICIENCY.

CREDIT.

Balance from 1885	\$8,054 98
Broadway Park maintenance, credit balance of account	\$77 76
Fire Department, credit balance of account	32 47
	<hr/>
<i>Amounts carried forward</i>	\$110 23
	<hr/>
	\$8,054 98

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 53

<i>Amounts brought forward</i>	\$110 23	\$8,054 98
Health Department, credit balance of account	214 36	
Highways, credit balance of account	81 35	
Indigent soldiers and sailors, credit balance of account	137 00	
Interest, credit balance of account	7,335 36	
Miscellaneous, credit balance of account,	1,351 95	
New fire hydrants, credit balance of account	4 16	
Police station incidentals, credit balance of account	267 82	
Printing and stationery, credit balance of account	229 57	
School fuel, credit balance of account	271 06	
Sewers, " " " "	509 51	
Sidewalks, " " " "	368 38	
Street lights, " " " "	1,047 61	
Support of poor, credit balance of account	3,139 94	
Water maintenance, credit balance of account	884 72	
Water-loan interest, credit balance of account	4,873 76	
Public Library building, credit balance of account	52 80	
	<hr/>	20,879 58
		<hr/>
		\$28,934 56

DEBIT.

Miscellaneous, transferred	\$8,054 98	
Balance to credit in account 1887	20,879 58	
	<hr/>	\$28,934 56

FUNDED DEBT.

CREDIT.

Balance from 1885		\$1,525,000 00
Cash, received for sale of		
City-loan Bond, No. 883	\$1,000 00	
" " " 884	60,000 00	
	<hr/>	
<i>Amounts carried forward</i>	\$61,000 00	\$1,525,000 00

<i>Amounts brought forward</i>	.	\$61,000 00	\$1,525,000 00
Water-loan Bond, No. 228	.	7,500 00	
“ “ Nos. 229 to 238,		10,000 00	
“ “ “ 239 to 256,		18,000 00	
“ “ “ 257 to 266,		10,000 00	
“ “ “ 267 to 276,		10,000 00	
		<hr/>	116,500 00
			<hr/>
			\$1,641,500 00

DEBIT.

Cash, paid:—

City-loan Bonds, Nos. 175 to 182,	\$40,000 00
“ “ “ 183 to 185,	15,000 00
“ “ No. 186.	5,000 00
“ “ “ 187.	1,000 00
Water-loan Bonds, Nos. 23 to 27,	50,000 00
“ “ No. 28	5,500 00

\$116,500 00

Balance to credit in account 1887 . 1,525,000 00

\$1,641,500 00

FIRE DEPARTMENT.

CREDIT.

Appropriations, amount assessed	.	.	.	\$24,000 00
Cash, received of L. W. Manning, tele- graph pole	.	.	.	\$0 50
Edward N. Buxton, old wood	.	.	.	2 00
Lorenzo W. Dow, manure	.	.	.	52 00
A. M. Prescott, horse	.	.	.	35 00
				<hr/>
				89 50
				<hr/>
				\$24,089 50

DEBIT.

Cash, paid James R. Hopkins, chief engi- neer	.	.	.	.	\$1,200 00
Nathaniel C. Barker, assistant engi- neer	.	.	.	.	300 00
					<hr/>

Amounts carried forward . . \$1,500 00 \$24,089 50

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 55

<i>Amounts brought forward</i>	.	.	\$1,500 00	\$24,089 50
Steamer engineer	.	.	1,080 00	
Steamer fireman	.	.	900 00	
Seven drivers	.	.	6,300 00	
Henry A. Angier, substitute driver	.	.	35 00	
Lucius B. Angier,	"	"	90 54	
E. J. Brown,	"	"	18 87	
William H. Dennis,	"	"	77 42	
Charles E. Kirkpatrick, substitute driver	.	.	61 45	
William A. Peery, substitute driver	.	.	33 87	
George C. Tucker,	"	"	35 00	
Steamer Engine Company	.	.	786 00	
John E. Wool Hose Company	.	.	670 00	
Winter Hill Hose Company	.	.	691 00	
George H. Foster Hose Company	.	.	675 16	
George O. Brastow Hose Company	.	.	691 00	
R. A. Vinal Hook-and-ladder Company	.	.	1,356 00	
City of Boston, water for hydrants	.	.	1,737 12	
" " " water for houses	.	.	98 70	
Seward Dodge, blacksmithing and horseshoeing	.	.	102 53	
Charles Maguire, horseshoeing	.	.	31 90	
Timothy O'Brien,	"	.	48 63	
C. M. Ingalls,	"	.	31 05	
W. H. Richardson,	"	.	34 00	
Everett E. Onley,	"	.	3 25	
Cook Rymes & Co.,	"	.	75	
J. Leland, wheelwright work	.	.	6 50	
E. Spalding, harness work	.	.	83 25	
William Mitchell, harness work	.	.	18 00	
Charles E. Barry,	"	"	7 50	
Joseph Cogan, hames, etc.	.	.	66 00	
E. B. Morgan, painting	.	.	96 75	
J. Q. Twombly,	"	.	11 15	
E. H. Buxton,	"	.	14 50	
J. C. Dyer, glazing	.	.	5 10	
<i>Amounts carried forward</i>	.	.	\$17,397 99	\$24,089 50

<i>Amounts brought forward</i>	\$17,397 99	\$24,089 50
A. Fisher, glazing	1 50	
W. S Walker, "	3 75	
A. C. Winning, mason work	10 38	
D. P. Bucknam, " "	23 25	
Horace P. Ewell, carpenter work,	1 75	
Elijah Walker, " "	204 63	
James F. Davlin, plumbing	47 50	
Folger & Dupont, "	9 72	
E. F. Trefren, "	4 75	
H. W. Covell, stove work	5 56	
J. E. Parsons, " "	1 00	
D. J. Bennett, repairing wagon	1 75	
David W. Crocker, " "	4 25	
E. Teel & Co., " "	7 00	
Union Square Carriage Company, repairing wagon	59 35	
William T. Henderson, repairing ap- paratus	85 50	
Kendall & Roberts, repairing steamer	11 70	
Charles Holmes & Son, furnace and hardware	179 95	
H. W. Raymond, hardware, etc.	19 11	
Gardner & Chandler, "	24 00	
Howe & Flint, "	4 64	
Whitney & Snow, "	1 84	
J. A. Durell, "	3 33	
W. L. Snow, "	16 01	
Broad Gauge Iron Works, hardware, etc.	3 50	
L. M. Ham & Co., hardware, etc.	69 00	
T. Ivers & Son, chains	5 25	
American Steam Gauge Company, repairing gauge	2 00	
Crosby Steam Gage and Valve Company, oiler, etc.	2 25	
Smith & Anthony Stove Company, heatérs	39 64	
<i>Amounts carried forward</i>	\$18,251 85	\$24,089 50

<i>Amounts brought forward</i>	\$18,251 85	\$24,089 50
Boston Woven Hose Company, hose, etc.	62 25	
Silsby Manuf. Company, hose, etc.	2 80	
Bishop & Brother, ladders, etc.	105 00	
George K. Paul & Co., waste.	11 00	
Edwin Rogers, fire-alarm apparatus,	918 24	
Abiel Pevey, zincs and coppers	95 40	
Pevey Brothers, " "	23 20	
Albert L. Russell, batteries	6 25	
J. J. Herne, sawdust	1 75	
S. D. Hicks & Son, copper	6 00	
Andrew S. Jackson, supplies	75 34	
William Spear, scrapers	3 00	
Leander Barber, Jr., brooms	6 00	
Murphy, Leavens & Co., dusters	9 80	
Gilman & Co., wagon	50 00	
J. A. McCarthy, caravan	50 00	
Joseph J. Giles, furniture	16 10	
Jackson, Caldwell & Co., furniture	10 00	
William Scheubeler, dry goods	18 00	
McCrillis & Kendall, bedding	19 06	
J. F. Burton, papering	1 99	
Flynn Brothers, moulding, etc.	29 40	
Enoch Robinson, locks and keys	4 00	
S. J. Wood, keys, etc.	1 20	
John L. Crafts, rope, etc.	49 64	
Knowles Brothers, salt, etc.	14 35	
T. Spellman, soap	26 12	
Charles Bartley, oil, etc.	4 03	
D. E. Hennessey, salt, etc.	1 25	
J. P. Squire & Co., oil	12 47	
George Dunbar & Co., compound, etc.	52 80	
Hall's English Food Company, feed,	8 00	
Elias Lathrop, hoof ointment	4 00	
Wetherbee & Co., " "	3 50	
Thomas Hollis, vitriol, etc.	135 69	
<i>Amounts carried forward</i>	\$20,089 48	\$24,089 50

<i>Amounts brought forward</i>	.	.	\$20,089 48	\$24,089 50
George H. Cowdin, drugs	.	.	5 45	
James E. Abbott, veterinary services	.	.	45 20	
Lewis Putnam, veterinary services	.	.	6 00	
H. B. Wells, " "	.	.	10 00	
John E. Hill, foot pads	.	.	5 00	
Howe Curry-comb Company, curry-combs	.	.	3 50	
A. M. Prescott, hay, straw, etc.	.	.	856 93	
E. R. Perham, " "	.	.	30 52	
Fulton O'Brion, " "	.	.	113 84	
Nathan Tufts & Son, grain	.	.	512 72	
G. M. Winslow & Co., fuel	.	.	213 92	
B. F. Wild & Co., " "	.	.	207 74	
New England Telephone and Telegraph Company, rentals and tolls,			43 15	
Charlestown Gas Company, gas	.	.	108 74	
Cambridge Gas Lighting Company, gas	.	.	190 46	
Nelson & Thompson, carriage hire	.	.	8 00	
J. A. McLane, use of horse	.	.	10 00	
R. T. Blackwell, use of pung	.	.	5 00	
Sturtevant Brothers, horses and horse hire	.	.	737 50	
Welch & Hall, horse	.	.	300 00	
Dennis Ryan, labor	.	.	6 00	
Sundry persons, extra fire duty	.	.	93 50	
N. C. Barker, gas piping	.	.	15 00	
Mrs. Calvert, washing	.	.	34 02	
Mary A. Brown, " "	.	.	28 75	
Thomas H. Daly, " "	.	.	24 87	
E. W. Ring, " "	.	.	21 35	
Samuel H. Stevens, washing	.	.	29 96	
J. H. Cauley, meals	.	.	4 03	
H. T. & W. S. Durgin, ice	.	.	35 00	
Boston Ice Company, ice	.	.	6 00	
<i>Amounts carried forward</i>	.	.	\$23,801 63	\$24,089 50

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 59

<i>Amounts brought forward</i>	\$23,801 63	\$24,089 50
Dexter F. Bennett, premium of insurance	48 75	
W. C. Crane, premium of insurance	75 00	
Aaron R. Gay & Co., stationery	36 75	
J. O. Hayden & Co., printing, etc.	71 25	
Day's Express, expressing	11 15	
Blackall's Express, "	1 25	
W. J. London, "	1 25	
Perham's Express, "	3 45	
Thorpe's Express, "	55	
Highways account, crushed stone	6 00	
	<u>\$24,057 03</u>	
Excess and deficiency, balance to credit of account	32 47	
		<u><u>\$24,089 50</u></u>

HEALTH DEPARTMENT.

CREDIT.

Appropriations, amount assessed		\$3,500 00
Cash, received of George I. Vincent, permits to keep swine and goats, and collect grease	\$293 00	
Highways account, permit to keep swine	10 00	
	<u>303 00</u>	
		<u>\$3,803 00</u>

DEBIT.

Cash, paid Wm. H. Brine, inspector	\$1,000 00	
Martin Gill, collecting ashes	750 00	
Jeremiah McCarthy, "	1,129 96	
E. R. Perham, "	1 25	
W. H. Whitcomb, "	75	
Highways account, "	87	
Sewers account, "	50	
Henry Gray, collecting offal	450 00	
	<u>\$3,333 33</u>	
<i>Amounts carried forward</i>		<u><u>\$3,803 00</u></u>

<i>Amounts brought forward</i>	\$3,333 33	\$3,803 00
Sundry persons, burying dead animals	62 00	
Geo. H. Cowdin, peppermint tubes,	19 36	
Burt & Henshaw, sulphur	5 28	
Thomas Waterman, vaccine virus	14 50	
Photo-Electrotype Company, maps	9 00	
George D. Goodwin, drain pipe	5 63	
J. O. Hayden & Co., printing	33 60	
Aaron R. Gay & Co.; stationery	11 25	
E. S. Tobey, rent of post-office box,	5 00	
L. H. Brown, carriage hire	11 50	
Joshua Eldridge, officer's fees	1 50	
Dennis Callahan, labor	23 63	
Thomas Dorsey, labor	39 37	
Andrew Desmond, labor	3 94	
James F. McCarthy, labor	8 75	
Mrs. Lacey, labor	1 00	
	<hr/>	
	\$3,588 64	
Excess and deficiency, balance to credit of account	214 36	
	<hr/>	
		\$3,803 00

HIGHWAYS.

CREDIT.

Appropriations, amount assessed		\$32,000 00
Interest, transferred		200 00
Cash, received of John A. Cummings, pasturage	\$5 00	
W. H. Hutchinson, driveway	18 09	
H. G. Collins, "	18 25	
George P. Hammond, "	3 42	
J. A. Littlefield, "	11 35	
Q. A. Vinal, trustee, "	15 64	
Edward Glines, "	18 45	
H. E. Hill, edgestones	34 50	
Heirs of Nathan Tufts, edgestones,	9 48	
	<hr/>	
<i>Amounts carried forward</i>	\$134 18	\$32,200 00

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 61

<i>Amounts brought forward</i> . . .	\$134 18	\$32,200 00
Third Universalist Church, edgestones	33 99	
D. W. Lowell, edgestones	30 19	
John P. Squire, "	35 35	
J. A. Tapley, "	14 79	
Peter Murray, "	15 63	
John Manning, "	39 47	
T. F. Cummings, sidewalk	6 15	
Albert E. Hughes, "	4 65	
S. R. Chace, "	58 29	
F. A. Titus, "	4 65	
Town of Wakefield, gravel	15 20	
E. B. Morgan, filling	27 30	
Dennis Collins, crushed stone	1 50	
Christopher Burke, ledge stone	41 10	
John E. Sylvester, loam	25 00	
Farrell Foundry Machine Company, old iron, etc.	65 54	
George McKenna, old carts	25 00	
John Kennedy, old wagon	5 00	
R. M. Baldwin, hay	18 85	
Charles H. North, hogs	224 89	
Christopher Burke, pigs	8 00	
Arthur Murley, rent	64 00	
Thomas Ormand, rent	72 00	
Broadway Park maintenance, labor and teaming	847 47	
Sidewalk account, materials and teaming	829 41	
Health Department, removing ashes,	87	
Miscellaneous account, driveway City Hall	17 64	
Fire Department account, crushed stone	6 00	
Schoolhouse incidentals account, crushed stone	1 50	
	<hr/>	2,673 61
<i>Amount carried forward</i>		<hr/> \$34,873 61

Amount brought forward \$34,873 61

DEBIT.

Cash, paid laborers	\$20,399 62
Frank G. Williams, salary as superintendent of streets	1,500 00
Frank G. Williams, board of horses,	417 17
Nathan Tufts & Son, grain, etc. . . .	683 96
S. W. Thaxter & Co., "	68 40
R. W. Willey & Co., "	281 40
Proctor Brothers, "	373 12
A. M. Prescott, "	8 92
C. L. Stevens, "	5 04
James E. Whitaker & Co., hay	296 45
Joseph Breck & Son, seed	6 95
Timothy O'Brien, horseshoeing	387 34
A. Clement, "	7 01
C. W. Ingalls, "	2 66
P. O'Neil, "	4 65
Seward Dodge, blacksmithing	100 55
F. Dorris, "	241 46
Everett E. Onley, "	2 00
H. G. Collins, "	9 45
B. F. Robinson, "	2 61
F. Leland, wheelwright work	19 25
John Kennedy, repairing wagon	10 75
David W. Crocker, repairing carts	113 50
N. L. Pennock, harness work	16 00
E. Spalding, " "	49 00
James Forgie & Son, " "	54 55
James E. Crawford, carpenter work,	89 00
Wm. H. McCarthy, " "	81 00
R. A. Melvin & Co., " "	19 18
John R. Thompson, " "	5 10
J. Q. Twombly, painting	13 24
James A. Davlin, plumbing	86 72
J. A. Durell, hardware	26 79
H. W. Raymond, "	25 26

Amounts carried forward . . . \$25,408 10 \$34,873 61

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 63

<i>Amounts brought forward</i>	. . . \$25,408 10	\$34,873 61
W. L. Snow, hardware	5 84	
Whitney & Snow, "	56 21	
Howe & Flint, "	1 39	
Cook, Rymes & Co., tools	103 08	
Parker & Wood, "	70 76	
Underhill Bros., "	2 30	
Hussey, Howe & Co., steel	19 50	
Farrell Foundry and Machine Com- pany, plates for crusher	218 43	
Guptell & Dove, iron screens	25 44	
Osgood & Hart, repairing roller	77 23	
Knowles Bros., shovels, etc.	3 10	
James M. Cusker, handles	35 62	
Charles Gott, snow-ploughs	60 00	
Hub Forge Company, horseshoes	2 50	
A. S. Symmes, axle	6 75	
Crosby Steam Gauge and Valve Company, repairing gauge	1 25	
Bay State Belting Company, pack- ing	2 36	
M. D. Jones, drinking fountain	140 00	
Henry F. Jones, repairing fountain	7 90	
Union Glass Company, tubes	60	
S. L. Holt & Co., washers, etc.	3 00	
W. Emery & Co., sash	40	
George D. Goodrich, drain pipe	6 81	
John F. Ayer, lumber	177 14	
Leander Barber, brooms	5 50	
John P. Downey, paving stones, edgestones, etc.	2,461 45	
John P. Downey, labor at Waltham gravel bank	527 00	
Jeremiah McCarthy, stone	1,341 30	
Frank Buttimer "	85 20	
Sanborn & Hatch, bricks	279 10	
John Thresher, "	97 50	
R. H. Carpenter, watering trough	31 00	
<i>Amounts carried forward</i>	. . . \$31,263 76	\$34,873 61

<i>Amounts brought forward</i>	.	.	\$31,263 76	\$34,873 61
W. F. Devine, slating	.	.	80 89	
George H. Sampson, powder, etc.	.	.	409 41	
R. K. Carpenter, car mover	.	.	5 00	
M. N. Stearns, sand	.	.	12 00	
G. W. Bragdon, fling saws	.	.	3 75	
S. J. Wood, keys	.	.	4 50	
Samuel Walker & Co., oil	.	.	45 60	
J. Jones & Co., oil	.	.	8 44	
J. E. Litchfield, vinegar	.	.	2 00	
Charles H. North & Co., salt	.	.	1 60	
Olney Bros, oil	.	.	1 70	
Dexter G. Benner, mustard	.	.	1 20	
W. Scheubeler, flannel	.	.	2 22	
E. B. Sears, robe	.	.	6 50	
H. Wellington, fuel	.	.	309 40	
G. M. Winslow & Co., fuel	.	.	15 60	
Charles Booth, weighing hay	.	.	1 20	
Whitney West, mowing	.	.	1 75	
William Hamilton, "	.	.	15 00	
Christopher Burke, teaming	.	.	701 00	
Christopher Burke, labor at Waltham gravel bank	.	.	453 65	
John McCauley, teaming	.	.	256 50	
George McKenna, "	.	.	29 25	
Henry Gray, offal	.	.	10 00	
Health Department, permit to keep swine	.	.	10 00	
Charles H. Crane, drugs	.	.	4 95	
Cheney & Myrick, "	.	.	23 57	
James E. Abbott, veterinary services,			53 00	
Henry Smith, " "			3 00	
New England Telephone and Tele- graph Company, rentals and tolls,			64 60	
Western Union Telegraph Company, telegrams	.	.	1 24	
Blackall's express, expressing	.	.	3 00	
E. R. Perham, "	.	.	1 70	
<i>Amounts carried forward</i>	.	.	\$33,806 98	\$34,873 61

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 65

<i>Amounts brought forward</i>	\$33,806 98	\$34,873 61
A. L. Sanborn, carriage hire	10 00	
H. W. Chase, " "	4 50	
Boston and Providence Railroad, freight	9 36	
Aaron R. Gay & Co., stationery	46 50	
J. O. Hayden & Co., advertising	49 80	
W. C. Crane, premium of insurance	15 00	
Charles S. Robertson, premium of insurance	225 00	
Middlesex Registry of Deeds, re- cording	3 05	
H. D. & W. S. Durgin, ice	30 00	
Town of Winchester, tax	10 95	
Town of Wakefield, "	25 26	
City of Waltham, "	114 75	
Town of Medford, half cost of main- taining Middlesex Avenue bridge	371 33	
City of Boston, water rates	57 78	
Silas D. Carter, refreshments	12 00	
	<hr/>	
	\$34,792 26	
Excess and deficiency, balance to credit of account	81 35	
	<hr/>	
		\$34,873 61
		<hr/> <hr/>

INDIGENT SOLDIERS AND SAILORS.

CREDIT.

Appropriation, amount assessed	\$600 00
State of Massachusetts (indigent soldiers and sail- ors), one half of amount paid in 1886	463 00
	<hr/>
	\$1,063 00

DEBIT.

Cash, paid sundry persons	\$926 00
Excess and deficiency, balance to credit of account	137 00
	<hr/>
	\$1,063 00
	<hr/> <hr/>

INTEREST.

CREDIT.

Appropriations, amount assessed		\$55,000 00
Real-estate liens, interest on titles to the city on property deeded for non- payment of taxes and assessments,	\$13 47	
Cash, received on deposits in banks	708 32	
On taxes and assessments	7,586 32	
Of State Treasurer, national bank tax	4,956 59	
Corporation tax	5,228 60	
Foreign ships tax	997 41	
On tax titles released	1 31	
Blake Brothers & Co., premium on bonds	4,174 40	
		<u>23,666 42</u>
		<u>\$78,666 42</u>

DEBIT.

Cash, paid on funded debt:—		
\$35,500, one year at $5\frac{1}{2}$ per cent	\$1,952 50	
61,000, six months “ $5\frac{1}{2}$ “	1,677 50	
682,500, one year “ 5 “	34,125 00	
1,000, six months “ 5 “	25 00	
411,000, one year “ 4 “	16,440 00	
		<u>\$54,220 00</u>
Less coupons unpaid	100 00	
		<u>\$54,120 00</u>
Sundry persons, coupons unpaid	100 00	
		<u>\$54,220 00</u>
Cash, paid on temporary loans:—		
Suffolk Savings Bank, on note of \$100,000, four months and three days at $2\frac{3}{4}$ per cent	\$939 58	
		<u>\$939 58</u>
<i>Amounts carried forward</i>	\$939 58	<u>\$78,666 42</u>

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 67

<i>Amounts brought forward</i>	\$939 58	\$78,666 42
Commonwealth of Massachusetts, on note of \$75,000, four months at 3 per cent	768 75	
Suffolk Savings Bank, on note of \$75,000, eight months at 3 per cent	1,500 00	
Suffolk Savings Bank, on note of \$50,000, eight months at 3 per cent	1,000 00	
Commonwealth of Massachusetts, on note of \$125,000, eight months at 3 per cent	2,500 00	
Commonwealth of Massachusetts, on note of \$75,000, eight months at 3 per cent	1,500 00	
	<hr/>	
	\$8,208 33	
	<hr/>	
On funded debt	\$54,220 00	
On temporary loans	8,208 33	
	<hr/>	
	\$62,428 33	
Water maintenance transferred	1,000 00	
Police station incidentals transferred	300 00	
Highways	200 00	
Police	231 38	
Schoolhouse incidentals	705 92	
Watering streets	40 46	
Salaries	377 40	
School contingent	695 58	
School teachers' salaries	4,942 26	
Public Library	409 73	
	<hr/>	
	\$71,331 06	
Excess and deficiency, balance to credit of account	7,335 36	
	<hr/>	
		\$78,666 42
		<hr/>

HIGHWAY BETTERMENT ASSESSMENTS.

CREDIT.

Cash, received of sundry persons, assessments	\$2,860 87	
Balance to debit in account, 1887	987 24	
	<hr/>	\$3,848 11

DEBIT.

Balance from 1885		<u>\$3,848 11</u>
-----------------------------	--	-------------------

MISCELLANEOUS.

CREDIT.

Excess and deficiency, transferred		\$8,054 98
Real-estate liens, costs on titles to the city on property deeded for non-payment of taxes and assessments	\$47 10	
Cash, received of sundry persons, costs on property sold and prepared for sale for non-payment of taxes and assessments	786 46	
On real-estate liens released	3 00	
Sundry persons, liquor licenses	13 00	
M. F. Burns, county fees	2 00	
B. F. Johnson, answering trustee writ	1 25	
Thomas Cunningham, milk inspector's fees	137 00	
Charles E. Gilman, city clerk:—		
Marriage certificates	160 50	
Billiard tables, licensed	4 00	
Liquor licenses	12 00	
Junk licenses	68 00	
Licensing dogs	190 60	
Auctioneers' licenses	22 00	
	<hr/>	<hr/>
<i>Amounts carried forward</i>	\$1,346 91	\$8,054 98

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 69

<i>Amounts brought forward</i>	\$1,346 91	\$8,054 98
Recording mortgages and assignments	302 74	
	<hr/>	\$1,749 65
		<hr/>
		\$9,804 63

DEBIT.

Cash, paid F. C. Fuller, carpenter work	\$32 25	
L. Arnold, " "	48 35	
George W. Trefren, " "	46 00	
Melvin & Chandler, " "	49 35	
L. C. Duncklee, " "	13 50	
R. A. Stevens, " "	5 88	
A. S. Arnold, " "	5 11	
Harry Holt, " "	82	
S. & C. H. Williams, " "	50	
George M. Burckes, " "	15 59	
J. Q. Twombly, painting	31 62	
J. M. Burckes, mason work	100 44	
C. A. Legallee, plumbing	14 71	
James F. Davlin, "	1 25	
Seward Dodge, blacksmithing	3 60	
L. C. Seavey, slating	5 30	
J. A. Merrifield, stove work	2 00	
Calvin I. Sawyer, whitewashing	9 00	
A. A. Sanborn, steam fitting	44 39	
Ingalls & Kendrick, repairing boiler	11 69	
A. M. Sibley, repairing boiler, etc.	8 00	
William Read & Son, ammunition	49 13	
G. W. Manning, labor on flag-staff	48 69	
Young, Caldwell & Odiorne, flag-staff	210 00	
Fitch & Jay, iron work on flag-staff,	28 00	
Bakers & Humphrey, halliards	1 75	
John L. Crafts, removing flag-staff	48 00	
C. S. Decker, awning	7 75	
R. Sherburne, plate glass	4 10	
	<hr/>	
<i>Amounts carried forward</i>	\$846 77	\$9,804 63

<i>Amounts brought forward</i>	\$846 77	\$9,804 63
Wm. Poole, shade	2 00	
Abram French & Co., water cooler	10 80	
Justus Roe, steel tape	7 00	
Albert L. Russell, repairing lighter	1 00	
H. W. Raymond, hardware	29 57	
William Hall & Co., "	4 13	
Whitney & Snow, "	20 00	
Howe & Flint, "	23 67	
J. A. Durell, "	1 25	
A. J. Wilkinson & Co., hardware	1 00	
Jackson, Caldwell & Co., cus- padores	6 00	
Hill & Langtrety, leather bag	5 25	
W. W. Winship, messenger's box	5 50	
Walter S. Barnes, boxes	4 00	
Pulsifer, Jordan & Pfaff, paper	3 52	
Frost & Adams, stationery	4 00	
J. O. Hayden & Co., advertising	21 90	
L. D. Miller, polish	1 00	
Thomas Hollis, drugs, etc.	4 55	
Charles Bartley, soaps, etc.	13 50	
Brine & Norcross, brushes and combs	6 38	
W. Scheubeler, brushes and combs	2 50	
J. H. Brooks, towels	2 75	
A. W. Mitchell, rubber stamp	4 60	
Hall Rubber Company, mats	5 75	
Cambridge Gas Light Company, gas,	260 88	
City of Boston, water	31 37	
Geo. M. Winslow & Co., fuel	103 32	
B. F. Wild & Co., fuel	140 44	
Wadsworths, Howland & Co., en- gineer's supplies	55 82	
Charles C. Hutchins, engineer's sup- plies	11 50	
Engineer's assistants, car fare, etc.,	6 59	
New England Telephone and Tele- graph Company, rentals and tolls,	175 55	
<i>Amounts carried forward</i>	\$1,823 86	\$9,804 63

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 71

<i>Amounts brought forward</i>	.	.	\$1,823 86	\$9,804 63
H. D. & W. S. Durgin, ice	.	.	40 00	
E. R. Perham, expressing	.	.	13 25	
Wm. J. London, expressing	.	.	11 65	
Stephen & Co.,	"	.	5 20	
Thorpe's Express,	"	.	55	
A. L. Sanborn, carriage hire	.	.	12 00	
R. T. Blackwell, teaming	.	.	21 00	
S. J. Wood, keys	.	.	5 60	
S. Tyler Hicks, refreshments	.	.	43 00	
Silas D. Carter,	"	.	5 00	
Jairus Mann, watching	.	.	45 00	
Jairus Mann, expenses "Empire State" excursion	.	.	65 50	
M. A. Mann, washing	.	.	20 00	
Charles Robinson, Jr., rent	.	.	10 00	
George D. Wilde, rent	.	.	30 00	
St. Joseph's Total Abstinence So- ciety, rent	.	.	25 00	
James M. Shute, rent	.	.	30 00	
James H. Flaws, use of hall	.	.	10 00	
S. H. Libby, services as auctioneer, Middlesex Registry of Deeds, re- cording	.	.	12 90	
Commonwealth of Massachusetts, one fourth amount received for liquor licenses	.	.	4 60	
A. B. Dearborn, return of births	.	.	3 00	
R. L. Lane,	"	"	3 00	
E. A. Sanborn,	"	"	4 25	
J. S. Couch,	"	"	3 00	
H. B. McIntire,	"	"	42 25	
George Cullis,	"	"	1 50	
Affidavit of posting	.	.	169 50	
W. A. Flaherty, return of deaths	.	.	44 50	
E. H. Marsh,	"	"	29 75	
J. W. Coveney,	"	"	13 50	
			7 75	
<i>Amounts carried forward</i>	.	.	\$2,556 11	\$9,804 63

<i>Amounts brought forward</i>	\$2,556 11	\$9,804 63
P. H. Rafferty & Co., return of deaths	15 75	
H. B. Runey, return of deaths	30 75	
C. H. Lockhart, " "	17 00	
J. A. Gregg, " "	2 00	
John Turner & Co., resetting curb	200 00	
R. F. Thompson, labor	2 00	
L. K. Whitcomb, " "	2 62	
James M. Coburn, " "	2 00	
James Deacon, " "	12 75	
Wm. H. Whitcomb, janitor	360 00	
A. M. Prescott, teaming	6 00	
George W. Prichard, teaming	8 50	
George I. Vincent, travelling ex- penses	5 80	
E. S. Tobey, rent of post-office box,	5 00	
C. M. Blake, newspapers	6 00	
Charles F. Robertson, clerical ser- vices	9 00	
Sarah A. Miles, clerical services	25 00	
Beulah M. Pierce, " "	8 50	
Grace M. Sewall, " "	1 75	
Clara M. Smith, " "	3 00	
Anna M. Smith, " "	3 00	
Jessie B. Underhill, clerical ser- vices	2 25	
J. A. McLane, posting	43 10	
Noah Harding, sealer of weights and measures	100 00	
Highways account, driveway	17 64	
Samuel C. Darling, disbursements	53 39	
Clerk of court, fees	2 40	
John Fairbain, " "	30 00	
Ward officers	288 00	
Hannah Dodge, verdict and costs for damages	1,561 33	
<i>Amounts carried forward</i>	\$5,380 64	\$9,804 63

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 73

<i>Amounts brought forward</i> . . .	\$5,380 64	\$9,804 63
George P. Deshorn, verdict and costs for damages	1,356 08	
C. G. Rowell, compensation for dam- ages	1,200 00	
H. Wellington, compensation for damages	30 00	
J. B. Eastman, poultry for Thanks- giving	50 94	
William S. Ward, poultry for Thanks- giving	60 39	
Charles S. Butters, poultry for Thanksgiving	67 20	
F. A. Ham, ringing bell	3 00	
A. L. Smith, "	3 00	
G. W. Littlefield, "	3 00	
Allen's Band, services Memorial day	68 00	
L. H. Brown, carriages	48 00	
Frank Walburg, drummers	3 00	
Thomas Young, flowers	55 00	
H. Partridge, flags	2 43	
Middlesex R. R. Company, special car	8 00	
S. H. Hadley, musical director	27 00	
J. O. Hayden & Co., printing	12 00	
W. D. Hayden, services at hall	3 00	
J. L. Whitaker, services at church	5 00	
George H. Patch, orator	25 00	
Woman's Relief Corps, refresh- ments	40 00	
John Battles, labor at cemetery	2 00	
	<hr/>	
	\$8,452 68	
Excess and deficiency, balance to credit of account	1,351 95	
	<hr/>	
		\$9,804 63

NEW FIRE HYDRANTS.

CREDIT.

Appropriations, amount assessed	\$1,000 00
---	------------

DEBIT.

Cash, paid Chapman Valve Company, hydrants	\$684 21
---	----------

Water maintenance, account labor, pipe, etc.	311 63
---	--------

\$995 84

Excess and deficiency, balance to credit of account	4 16
--	------

\$1,000 00

OVERLAY AND ABATEMENT.

CREDIT.

Balance from 1885	\$6,344 76
-----------------------------	------------

Taxes, amount added to the amount of taxes assessed as fractional divisions for convenience in ap- portionment, to be applied to abatement on taxes	1,900 91
--	----------

\$8,245 67

DEBIT.

Taxes, for abatements on taxes	\$4,342 33
--	------------

Balance to credit in account 1887	3,903 34
---	----------

\$8,245 67

OVERPLUS ON TAX SALES.

CREDIT.

Balance from 1885	\$102 13
-----------------------------	----------

Cash, received over taxes and costs on real estate sold for non-payment of taxes for 1884	635 93
--	--------

<i>Amount carried forward</i>	\$738 06
---	----------

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 75

Amount brought forward \$738 06

DEBIT.

Cash, paid sundry persons, overplus received on sale of their estates	\$504 10	
Balance to credit in account 1887	233 96	
		<u>\$738 06</u>

PROPERTY AND DEBT BALANCE.

CREDIT.

Renewals of funded debt	\$116,500 00
Public property acquired during the year 1886	15,515 06
Balance to debit in account 1887	274,558 30
	<u>\$406,573 36</u>

DEBIT.

Balance from 1885	\$290,073 36
Appropriations	116,500 00
	<u>\$406,573 36</u>

PUBLIC PROPERTY.

CREDIT.

Balance to debit in account, 1887	\$1,250,441 70
---	----------------

DEBIT.

Property and debt balance, property acquired during the year	\$15,515 06
Balance from 1885	1,234,926 64
	<u>\$1,250,441 70</u>

PUBLIC LIBRARY.

CREDIT.

Balance from 1885	\$402 60
Appropriations, amount assessed	2,500 00
Interest, transferred	409 73
	<u>\$3,312 33</u>
<i>Amount carried forward</i>	\$3,312 33

<i>Amount brought forward</i>		\$3,312 33
Cash received of county treasurer, return on dog licenses, 1885	\$1,728 54	
Librarian, fines	274 69	
Librarian, catalogues	36 60	
City of Boston, discount on water bill	1 20	
	<hr/>	2,041 03
		<hr/>
		\$5,353 36

DEBIT.

Cash, paid Little, Brown & Co., books	\$1,178 37	
Lockwood, Brooks & Co., "	108 22	
Estes & Lauriat, "	342 40	
Wm. B. Clark & Carruth, "	241 90	
Bradley & Whidden, "	30 00	
D. Appleton & Co., "	75 00	
Cleaves, Macdonald & Co., "	214 19	
Houghton, Mifflin & Co., "	22 50	
Mason & Fowler, "	15 00	
E. A. Capen, "	15 00	
W. H. Becker, "	3 00	
John J. W. Reaves, "	7 00	
William A. Mowry, "	1 00	
D. L. Guernsey, "	10 00	
L. Prang, "	15 50	
W. H. Thompson, "	4 75	
C. C. Caduc, "	30 00	
Publisher of "Science" magazine	5 00	
" "Weekly" "	3 20	
Ira Bradley & Co., binding	19 14	
J. G. Roberts & Co., binding	120 05	
Babb & Stephens, printing	175 75	
Rockwell & Churchill, catalogues	128 51	
Thomas Groom & Co., stationery	4 00	
Hooper, Lewis & Co., "	3 25	
Hollingsworth & Whitney Com- pany, covers	6 32	
C. M. Blake, newspapers	12 00	
	<hr/>	
<i>Amounts carried forward</i>	\$2,791 05	\$5,353 36

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 77

<i>Amounts brought forward</i>	.	.	\$2,791 05	\$5,353 36
The "Nation," magazine	.	.	3 00	
H. W. Raymond, hardware	.	.	3 15	
Whitney & Snow, dusters, etc.	.	.	6 00	
Holland & Daniels, shades	.	.	1 50	
Walker & Pratt Mfg. Company, re- pairing heating apparatus	.	.	7 34	
Stillman & Nichol, gas fixtures	.	.	6 10	
W. H. Poole, " "	.	.	4 75	
Wassenius & Dusseault, desk	.	.	25 00	
Shaw, App'lin & Co., settees	.	.	91 70	
Cambridge Gas Light Company, gas, Standard Gas Governor Company, governor	.	.	173 91	
B. F. Wilde & Co., fuel	.	.	60 00	
Geo. M. Winslow & Co., fuel	.	.	82 80	
Geo. M. Winslow & Co., fuel	.	.	88 65	
F. L. Kelsey, agent, clock	.	.	35 00	
C. A. Legallee, plumbing	.	.	24 28	
L. C. Seavey, slating	.	.	2 63	
Geo. W. Burckes, carpenter work	.	.	7 04	
L. Arnold, " "	.	.	60 50	
Fred C. Fuller, " "	.	.	47 80	
William B. Stinson, " "	.	.	31 19	
R. A. Melvin & Co., " "	.	.	1 50	
C. K. Gordon, mason work	.	.	20 70	
City of Boston, water	.	.	20 00	
Wm. J. London, expressing	.	.	39 60	
N. J. McLaughlin, lawn dressing	.	.	51 00	
Michael Higgins, labor	.	.	108 00	
P. F. Smith, " "	.	.	15 00	
L. K. Whitcomb, " "	.	.	7 00	
H. A. Adams, librarian	.	.	700 00	
Lizzie Stevens, librarian's assistant	.	.	400 00	
Lottie Hopkins, " "	.	.	300 00	
Amy Manning, " "	.	.	59 82	
Harry Pillsbury, " "	.	.	43 05	
Irving Dadman, " "	.	.	16 15	
Harry Curtis, " "	.	.	10 10	
Herbert Smith, " "	.	.	8 05	

\$5,353 36

PUBLIC LIBRARY BUILDING.

CREDIT.

Balance from 1885	\$311 55
-----------------------------	----------

DEBIT.

Cash, paid Martin Mullin, granite curb- ing	\$258 75
Excess and deficiency, balance to credit of account	52 80
	<hr/>
	\$311 55

PRINTING AND STATIONERY.

CREDIT.

Appropriations, amount assessed	\$3,000 00
Cash, received of George C. Emerson, advertising	3 00

\$3,003 00

DEBIT.

Cash, paid J. O. Hayden & Co., printing and advertising	\$1,022 97
Rand, Avery & Co., printing annual reports	642 90
Babb & Stephens, printing	107 00
J. A. Cummings & Co., printing	75 00
McDonnell Bros., "	26 00
Coburn Bros., "	9 50
J. H. Bufford's Sons, "	61 50
Aaron R. Gay & Co., stationery	803 61
M. S. Tobin, "	1 25
National Reporting Bureau, financial reports	1 00
Wm. H. Smith, seal	2 00
Charles G. Whitten, stamp	1 25
Charles B. Stevens, recording	7 45
Robert Burlen, binding	12 00
	<hr/>
	\$2,773 43

Excess and deficiency, balance to credit of account	229 57
--	--------

\$3,003 00

POLICE.

CREDIT.

Appropriations, amount assessed	\$33,500 00	
Interest, transferred	231 38	
Cash, received of H. A. Chapin, clerk of court, for officer's fees, fines, etc., \$2,226 05		
John P. Squire, services of police	370 00	
	<hr/>	2,596 05
		<hr/>
		\$26,327 43

DEBIT.

Cash, paid M. C. Parkhurst, chief	\$1,500 00	
R. R. Perry, captain	1,200 00	
Samuel R. Dow, sergeant	1,000 00	
Edward McGarr, "	1,000 00	
C. C. Cavanagh, "	1,000 00	
George W. Bean, patrolman	912 50	
Samuel A. Brown, "	912 50	
George A. Bodge, "	912 50	
George H. Carleton, "	912 50	
Edward M. Carter, "	912 50	
Eugene A. Carter, "	912 50	
Anson H. Eaton, "	897 75	
John E. Fuller, "	912 50	
Edd. F. Fales, "	912 50	
John Hafford, "	912 50	
John F. Johnson, "	912 50	
Myron H. Kinsley, "	912 50	
Dennis Kelley, "	912 50	
Ivan Laighton, "	912 50	
Herbert H. Miller, "	912 50	
Judson W. Oliver, "	912 50	
P. W. Skinner, "	912 50	
Albion L. Staples, "	912 50	
George L. Smith, "	912 50	
Patrick J. Bench, "	551 25	
Edward E. Hamblin, "	857 50	
	<hr/>	
<i>Amounts carried forward</i>	\$24,431 50	\$26,327 43

<i>Amounts brought forward</i>	\$24,431 50	\$26,327 43
William J. Blaisdell, patrolman (special)	142 00	
D. P. Bucknam, patrolman (special)	30 00	
James A. McLane, " "	30 00	
James M. Murdough, " "	20 00	
George H. Perkins, " "	32 00	
F. A. Perkins, " "	30 00	
E. L. Robinson, " "	4 00	
B. F. Sheridan, " "	32 00	
Peter Savage, " "	30 00	
Peter J. Savage, " "	34 00	
Fred. H. Terrill, " "	140 00	
Joseph A. Young, " "	24 00	
M. C. Parkhurst, lock-up keeper	100 00	
M. C. Parkhurst, disbursements	17 05	
R. R. Perry, disbursements	1 00	
S. R. Dow, car fares, etc.	25 50	
E. M. Carter, " " "	1 81	
Eugene A. Carter, car fares, etc.	4 25	
C. C. Cavanagh, " " "	8 85	
Anson H. Eaton, " " "	1 25	
Dennis Kelley, " " "	19 83	
Ivan Loughton, " " "	75	
Richard Keefe, photographing	26 00	
George B. Kerr, buttons	36 00	
Geo. W. Simmons & Co., wreaths	2 00	
H. A. Winship, clubs	2 00	
John P. Lovell's Sons, revolvers, etc.	302 00	
Murphy & Co., supplies	13 50	
Union Glass Company, lanterns	12 00	
C. M. Blake, newspapers	22 50	
Little, Brown & Co., law books	21 50	
Aaron R. Gay & Co., stationery	16 31	
J. O. Hayden & Co., printing	9 50	
New England Telephone and Tele- graph Company, rentals and tolls,	66 70	
Western Union Telegraph Company, telegrams	8 71	
<i>Amounts carried forward</i>	\$25,698 51	\$26,327 43

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 81

<i>Amounts brought forward</i>	\$25,698 51	\$26,327 43
Union Square Carriage Company,		
repairing wagon	29 25	
D. Cutter, repairing badges	1 00	
Howe & Flint, lamp wicks	12	
Sturtevant Bros., horse	150 00	
Sturtevant Bros., soap, etc.	1 42	
W. Schuebeler, towels	3 00	
Caldwell & Staples, teaming	1 50	
Jackson, Caldwell & Co., furniture	5 00	
L. H. Brown, carriage hire	29 50	
A. L. Sanborn, horse keeping	86 73	
R. T. Blackwell, " "	199 80	
Lewis Putnam, veterinary services	2 00	
Silas D. Carter, meals furnished		
prisoners	39 00	
H. D. & W. S. Durgin, ice	30 00	
E. Spalding, harness work	9 25	
S. Dodge, blacksmithing,	3 30	
Timothy O'Brien, horse shoeing	13 37	
Elizabeth Avery, washing	16 68	
Sarah Monahan, "	2 00	
A. M. Prescott, teaming	2 00	
W. D. Hayden, labor	4 00	
	<hr/>	\$26,327 43

POLICE STATION INCIDENTALS.

CREDIT.

Appropriations, amount assessed	\$1,500 00
Interest, transferred	300 00
Cash, received of N. K. Bishop, use of hall,	\$12 00
Bachelors' Club, use of hall	41 00
Central Club	3 00
First Universalist Society, use of hall,	6 00
St. Joseph's Parish, use of hall	26 00
Washington Degree Camp, use of hall,	26 00
Woman's Christian Temperance	
Union, use of hall	8 00
	<hr/>
<i>Amounts carried forward</i>	\$122 00
	<hr/>
	\$1,800 00

<i>Amounts brought forward</i>	\$122 00	\$1,800 00
Somerville Co-operative Bank, use of court room	63 00	
Commonwealth of Massachusetts, rent of armory	233 33	
	<hr/>	418 33
		<hr/>
		\$2,218 33

DEBIT.

Cash, paid W. D. Hayden, janitor	\$750 00	
Wm. D. Hayden, extra help em- ployed	14 00	
Cambridge Gas Light Company, gas,	229 02	
Walworth Manufacturing Company, gasolene	70 41	
J. W. Acres, padding cell	176 00	
Lamprey & Marble, repairing	5 48	
Everett E. Onley, blacksmithing	8 00	
L. Arnold, carpenter work	28 86	
S. T. Kirk, " "	22 30	
C. A. Legallee, plumbing	39 70	
L. C. Seavey, slating	12 31	
D. P. Bucknam, whitewashing	17 00	
H. W. Raymond, hardware	20 34	
Howe & Flint, "	75	
Joseph J. Giles, chairs	2 25	
George H. Cowdin, sponges, etc.	3 69	
Sturtevant Bros., matches, etc.	75	
William L. Fox & Co., compound	8 75	
Walter Davis, teaming	50	
J. F. Manning, moving safe	70 00	
Thorpe's Express, expressing	6 50	
G. M. Winslow & Co., fuel	187 64	
B. F. Wilde & Co., "	231 00	
W. C. Crane, premium of insurance,	20 00	
City of Boston, water rates	25 26	
	<hr/>	\$1,950 51
Excess and deficiency, balance to credit of account	267 82	
	<hr/>	<hr/>
		\$2,218 33

REAL-ESTATE LIENS.

CREDIT.

Cash, received of sundry persons for tax titles re- leased	\$30 97
Balance to debit in account 1887	728 10
	<hr/>
	\$758 89

DEBIT.

Balance from 1885	\$507 54
Taxes, titles deeded to the city for non- payment of taxes	21 58
Sewer assessments, titles deeded to the city for non-payment of sewer assessments	169 20
Interest, titles deeded to the city for non- payment of taxes and assessments,	13 47
Miscellaneous, titles deeded to the city for non-payment of taxes and as- sessments	47 10
	<hr/>
	<u>\$758 89</u>

RENEWALS OF FUNDED DEBT.

CREDIT.

Appropriations, amount authorized by loans	\$116,500 00
--	--------------

DEBIT.

Property and debt balance, amount of funded debt paid in 1886	<u>\$116,500 00</u>
--	---------------------

SINKING FUND CONTRIBUTIONS.

CREDIT.

Appropriations, amount assessed	\$40,725 00
---	-------------

DEBIT.

Cash, paid commissioners of sinking funds	<u>\$40,725 00</u>
---	--------------------

STATE AID.

CREDIT.

State of Massachusetts, State aid, amount paid in 1886, charged to State	\$3,709 00
---	------------

DEBIT.

Cash, paid monthly pay-rolls for aid	<u>\$3,709 00</u>
--	-------------------

STATE OF MASSACHUSETTS.

CREDIT.

Taxes, amount assessed	\$20,085 00
----------------------------------	-------------

DEBIT.

Cash, paid State treasury State tax	<u>\$20,085 00</u>
---	--------------------

STATE OF MASSACHUSETTS—STATE AID.

CREDIT.

Cash, received of State treasurer	\$3,717 00
---	------------

Balance, Dec. 31, 1886, due from State, Dec. 1, 1887, to debit in account 1887	<u>3,560 00</u>
---	-----------------

\$7,277 00

DEBIT.

Balance from 1885	\$3,568 00
-----------------------------	------------

State aid, amount paid in 1866, as per account	<u>3,709 00</u>
---	-----------------

\$7,277 00

STATE OF MASSACHUSETTS—INDIGENT SOLDIERS
AND SAILORS.

CREDIT.

Cash, received of State treasurer	\$494 00
---	----------

Balance, Dec. 31, 1886, due from State, Dec. 1, 1887, to debit in account 1887	451 00
---	--------

<u>Amount carried forward</u>	<u>\$945 00</u>
---	-----------------

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 85

Amount brought forward \$945 00

DEBIT.

Balance from 1885	\$482 00	
Indigent soldiers and sailors, one half of amount paid in 1886, as per ac- count	463 00	
	<u> </u>	\$945 00

SUNDRY PERSONS.

CREDIT.

Balance from 1885		\$1,186 44
Interest, coupons due and unpaid	\$100 00	
Water loan, interest coupons due and unpaid	32 50	
	<u> </u>	132 50
		<u>\$1,318 94</u>

DEBIT.

Cash, paid sundry persons, amounts to their credit	\$87 50	
Balance to credit in account 1887	1,231 44	
	<u> </u>	\$1,318 94

SALARIES.

CREDIT.

Appropriations, amount assessed		\$21,900 00
Interest, transferred		377 40
		<u>\$22,277 40</u>

DEBIT.

Cash, paid Mark F. Burns, mayor	\$1,000 00	
Charles E. Gilman, city clerk	2,100 00	
John F. Cole, city treasurer and collector of taxes	3,200 00	
George A. Kimball, city engineer	2,000 00	
Samuel C. Darling, city solicitor	1,000 00	
T. M. Durell, city physician	950 00	
	<u> </u>	
<i>Amounts carried forward</i>	\$10,250 00	\$22,277 40

<i>Amounts brought forward</i>	\$10,250 00	\$22,277 40
Douglas Frazar, city auditor	450 00	
“ “ clerk of common council	200 00	
George I. Vincent, clerk of assessors and committees	1,800 00	
William P. Mitchell, assistant clerk of committees	1,200 00	
Jairus Mann, city messenger	1,400 00	
Thomas R. Roulstone, superintendent of buildings and street lights	1,400 00	
Aaron Sargent, treasurer of commissioners of sinking funds	200 00	
Elijah Walker, inspector of buildings	250 00	
Thomas Cunningham, inspector of milk	300 00	
Stillman H. Libby, assessor	500 00	
George W. Hadley, “	500 00	
Benjamin F. Thompson, assessor	500 00	
George W. Bartlett, assistant assessor	200 00	
William A. Flaherty, assistant assessor	200 00	
Hiram D. Smith, assistant assessor	200 00	
Samuel T. Richards, assistant assessor	200 00	
Charles E. Gilman, registrar of voters	150 00	
John R. Conant, registrar of voters	200 00	
C. G. Rowell, “ “	150 00	
S. G. A. Twycross, “ “	150 00	
Engineer’s assistants	1,657 40	
William H. Whitcomb, janitor of City Hall and Public Library	220 00	
	<hr/>	<hr/> <hr/>
		\$22,277 40

STREET LIGHTS.

CREDIT.

Appropriations, amount assessed		\$9,500 00
Cash, received of George W. Burckes <i>et al.</i> ,		
lamp-post	\$20 00	
John Cochran <i>et al.</i>	20 00	
William R. Cann	20 00	
Fred C. Fuller <i>et al.</i>	20 00	
Alexander A. Foster	20 00	
John Herbert <i>et al.</i>	60 00	
A. P. Huntress <i>et al.</i>	20 00	
Thomas Hollis	20 00	
George W. Holden <i>et al.</i>	20 00	
George D. Haven	20 00	
O. S. Knapp <i>et al.</i>	20 00	
Edward Perkins <i>et al.</i>	20 00	
W. P. Rice <i>et al.</i>	20 00	
E. S. Sparrow <i>et al.</i>	20 00	
John Stackpole <i>et al.</i>	20 00	
J. G. Abbott, damage to lamp-post,	15 48	
Martin Gill, damage to lamp-post .	17 74	
John Manning, damage to lamp-post,	12 36	
Maverick Oil Company, empty barrels	9 00	
Horatio Wellington & Co., damage to lamp-post	15 40	
	<hr/>	409 98
		<hr/>
		\$9,909 98

DEBIT.

Cash, paid Cambridge Gas Light Company, gas	\$2,339 03	
Cambridge Gas Light Company, piping, etc.	424 71	
Charlestown Gas Company, gas	1,873 54	
Charlestown Gas Company, piping, etc.	99 37	
Globe Gas Light Company, torches, etc.	9 40	
	<hr/>	
<i>Amounts carried forward</i>	\$4,746 05	\$9,909 98

<i>Amounts brought forward</i> . . .	\$4,746 05	\$9,909 98
Christopher Burke, lighting and care of lamps	728 06	
Patrick F. Moore, lighting . . .	262 60	
Patrick O'Connell, " . . .	414 00	
William H. Archibald, " . . .	250 65	
James Teylin, " . . .	64 70	
Benjamin F. Shute, " . . .	73 50	
Thomas F. Casey, " . . .	573 57	
William B. Berry, lamp-posts, etc. .	907 31	
Nathaniel Tufts, lanterns . . .	58 20	
E. H. Tarbell, burners	2 75	
McDowell & Hartz, torches . . .	1 75	
Martin Thayer, alcohol	8 75	
Samuel Walker & Co., oil . . .	16 22	
Capen, Sprague & Co., " . . .	1 10	
Holmes & Adams, gasolene . . .	285 87	
F. E. Studley, glycerine	30	
Hills, Turner & Co., glass . . .	40 50	
H. W. Raymond, " . . .	102 75	
Charles Holmes & Son, poles, etc. .	5 14	
Bishop & Brother, ladders . . .	11 75	
John Turner & Co., granite circles .	47 08	
William H. Poole, gas fitting . . .	16 21	
J. A. Durell, repairing lamps . .	110 29	
Everett E. Onley, " " . . .	13 75	
Howe & Flint, " " . . .	13 00	
G. M. Bowditch, " " . . .	6 15	
S. J. Wood, repairing lock . . .	75	
S. T. Kirk, carpenter work . . .	38 15	
J. M. Burckes, mason work . . .	30 12	
Walter Davis, teaming	1 00	
Wm. J. London, expressing . . .	2 50	
Blackall's Express, " . . .	75	
J. O. Hayden & Co., printing . .	17 10	
S. H. Libby, premium of insurance,	10 00	
	<hr/>	
	\$8,862 37	
Excess and deficiency, balance to credit of account	1,047 61	
	<hr/>	
		<u>\$9,909 98</u>

SIDEWALKS.

CREDIT.

Appropriations, amount assessed	\$4,000 00
Sidewalk assessments, assessments levied	3,598 32
	<hr/>
	\$7,598 32

DEBIT.

Cash, paid laborers	\$1,447 61
John P. Downey, edgestones, etc. . . .	3,567 82
John Thresher, bricks	983 45
John Medina, "	201 60
J. O. Hayden & Co., advertising	174 10
Aaron R. Gay & Co., stationery	8 00
Highways account, labor and materials	829 41
Sewers account, catch-basin curbs	17 95
	<hr/>
	\$7,229 94
Excess and deficiency, balance to credit of account	368 38
	<hr/>
	\$7,598 32

SIDEWALK ASSESSMENTS.

CREDIT.

Cash, received of sundry persons, assessments	\$1,610 42
Balance to debit in account 1887	3,446 97
	<hr/>
	\$5,057 39

DEBIT.

Balance from 1885	\$1,459 07
Sidewalks, assessments levied	3,598 32
	<hr/>
	\$5,057 39

SEWERS.

CREDIT.

Appropriations, amount assessed	\$8,000 00
Cash, received of W. R. Hicks & Co., old leather hose	\$24 54
	<hr/>
<i>Amounts carried forward</i>	\$24 54
	<hr/>
	\$8,000 00

<i>Amounts brought forward</i>	\$24 54	\$8,000 00
City of Cambridge, part cost of stone bounds	10 68	
Trustees of Massachusetts General Hospital, annual fee for permission to enter Fitchburg Street sewer	50 00	
Edward Smith, fee for entering Elm Street sewer	30 00	
Walter E. Powell, fee for entering Elm Street sewer	34 00	
Maurice Terry, puddling	88	
Charles A. Mongan, "	2 00	
Stephen Buttimer, "	1 00	
Maurice Buttimer, "	1 50	
Paul Kelley, "	2 00	
Sidewalks account, catch-basin curbs, Health Department, collecting ashes,	17 95	
	50	
		175 05
Sewer assessments, assessments levied		8,736 07
		<u>\$16,911 12</u>

DEBIT.

Cash, paid laborers	\$3,001 91	
George D. Goodrich & Co., drain pipe	1,041 64	
Portland Stone Ware Company, drain pipe	1,194 13	
Marcellus Day, drain pipe	27 52	
David W. Lewis, " "	189 02	
Osgood & Hart, castings	43 50	
W. O. Barbour & Co., castings	25 00	
William H. Carberry, "	4 25	
Howe & Flint, hardware	149 65	
H. W. Raymond, "	18 80	
Boston Belting Company, hose	3 00	
A. S. Jackson, repairing hose	30 65	
Sanborn & Hatch, bricks	39 62	
Thomas Casey, "	48 75	
Edward Foster, "	40 50	
<i>Amounts carried forward</i>	\$5,857 94	\$16,911 12

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 91

<i>Amounts brought forward</i>	\$5,857 94	\$16,911 12
Horatio Wellington & Co., cement	61 80	
George H. Sampson, powder	3 52	
Seward Dodge, blacksmithing	9 94	
Cook, Rymes & Co., " "	4 50	
F. Dooris, " "	2 80	
Worthley, Downes & Co., rubber boots	16 50	
Philip Eberle, rubber boots	1 25	
R. T. Blackwell, carriage hire	6 00	
A. Parker, catch-basin stones	200 00	
J. O. Hayden & Co., advertising	124 45	
Aaron R. Gay & Co., stationery	1 40	
Robert Burlen, binding plans	8 50	
Boston & Lowell Railroad, labor	9 50	
Leander Greeley, carpenter work	8 25	
I. H. Brown & Co., " "	90	
Charles Bartley, oil, etc.	1 20	
Water maintenance account, pipe, labor, etc.	103 10	
Vinal, Henderson <i>et al.</i> , land damages	68 08	
John McCarthy and wife, land damages	60 00	
City of Boston, water	37 60	
City of Cambridge, five ninths of expense of cleaning outlet of Bridge Street sewer	1,402 39	
Maurice Buttimer, balance for constructing sewer in Greenville and Boston Streets	35 73	
Maurice Buttimer, constructing sewer in Flint and Glen Streets	90 78	
Maurice Buttimer, constructing sewer in Fiske Avenue	313 03	
Maurice Buttimer, constructing drain pipe	96	
<i>Amounts carried forward</i>	\$8,430 12	\$16,911 12

<i>Amounts brought forward</i> . . .	\$8,430 12	\$16,911 12
Stephen Buttimer, constructing sewer in Thurston Street . . .	300 76	
Stephen Buttimer, constructing sewer in Bradford Avenue . . .	110 05	
Stephen Buttimer constructing sewer in Cross Street	316 55	
Richard Falvey, constructing sewer in Howe Street	396 30	
Richard Falvey, labor	3 00	
Paul Kelley, constructing sewer in Orchard Street	145 03	
Charles A. Mongan, balance for constructing sewer in Tennyson Street	49 28	
Charles A. Mongan, balance for constructing sewer in Hawkins Court and Church Street	64 03	
Charles A. Mongan, constructing sewer in Summer Street	1,522 62	
Charles A. Mongan, constructing sewer in Pemberton Street	674 17	
Charles A. Mongan, constructing sewer in Orchard and Dover Streets	114 40	
Charles A. Mongan, constructing sewer in Tyler Street	127 21	
Charles A. Mongan, constructing sewer in Kingman Court	164 87	
Charles A. Mongan, connecting drains and laying pipe	46 40	
Putterill & Killion, balance for constructing sewer in Graves Street, Willow and Highland Avenues, Cherry and Fairlee Streets	241 52	
Dennis Ryan, constructing sewer in Lowell and Vernon Streets	1,027 60	
<i>Amounts carried forward</i>	\$13,733 91	\$16,911 12

<i>Amounts brought forward</i>	\$13,733 91	\$16,911 12
Dennis Ryan, constructing sewer in Lowell Street	217 00	
Maurice Terry, constructing sewer in Wilton, Lowell, Appleton, Lawrence and Hinckley Streets	2,312 45	
Charles A. Mongan, constructing sewer in Tufts Street	138 25	
	<hr/>	
	\$16,401 61	
Excess and deficiency, balance to credit of account	509 51	
	<hr/>	
		\$16,911 12
		<hr/>

SEWER ASSESSMENTS.

CREDIT.

Cash, received of sundry persons, assessments	\$7,771 42
Real estate liens, titles to the city for non-payment of assessments	169 20
Balance to debit in account 1887	6,467 86
	<hr/>
	\$14,408 48

DEBIT.

Balance from 1885	\$5,672 41
Sewers, assessments levied	8,736 07
	<hr/>
	\$14,408 48
	<hr/>

SUPPORT OF POOR.

CREDIT.

Appropriations, amount assessed	\$15,000 00
Cash, received for support of paupers:	
Of city of Boston	\$189 50
" Cambridge	154 55
" Fitchburg	21 00
" Lowell	49 50
" Malden	22 50
" Newburyport	48 50
" Salem	10 50
	<hr/>
<i>Amounts carried forward</i>	\$496 05
	<hr/>
	\$15,000 00

<i>Amounts brought forward</i>	.	.	\$496 05	\$15,000 00
Of town of Arlington	.	.	46 50	
“ Carlisle	.	.	59 90	
“ Medford	.	.	90 88	
“ Manchester	.	.	58 00	
“ Natick	.	.	24 50	
“ Sandwich	.	.	45 75	
“ Sunderland	.	.	7 00	
“ Sudbury	.	.	142 71	
“ Woburn	.	.	27 00	
State of Massachusetts, support of				
State paupers	.	.	809 73	
Burial of State paupers	.	.	65 00	
S. W. Dow, support of pauper	.	.	212 17	
C. C. Folsom, guardian, support of				
pauper	.	.	160 74	
Patrick Foley, support of pauper	.	.	13 13	
O. S. Knapp, guardian, support of				
pauper	.	.	95 32	
J. A. Sawyer, administrator, support				
of pauper	.	.	42 00	
Felix Taylor, support of pauper	.	.	48 00	
E. J. Jenkins, “ “	.	.	25 39	
Elizabeth Abbott, money not called				
for	.	.	12 00	
			—————	2,481 77
				<u>\$17,481 77</u>

DEBIT.

Cash, paid for support of paupers, viz. :—

Asylum for Chronic Insane	.	.	\$357 39
Boston City Hospital	.	.	31 00
Commonwealth of Massachusetts	.	.	391 56
Danvers Lunatic Hospital	.	.	889 54
Massachusetts General Hospital	.	.	43 00
Carney Hospital	.	.	9 29
State Hospital for Insane	.	.	860 70
Taunton Lunatic Hospital	.	.	180 46

<i>Amounts carried forward</i>	.	.	\$2,762 94	\$17,481 77
--------------------------------	---	---	------------	-------------

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 95

<i>Amounts brought forward</i>	.	.	\$2,762 94	\$17,481 77
Worcester Lunatic Hospital	.	.	1,257 82	
James M. Fiske, House of Cor- rection	.	.	143 43	
City of Boston	.	.	631 70	
“ Cambridge	.	.	64 24	
“ Chelsea	.	.	114 35	
“ Fall River	.	.	2 20	
“ Lawrence	.	.	96 00	
“ Lynn	.	.	59 00	
“ Lowell	.	.	146 46	
“ Newburyport	.	.	130 00	
“ Taunton	.	.	2 00	
“ Worcester	.	.	105 00	
Town of Andover	.	.	78 00	
“ Barnstable	.	.	52 00	
“ Holliston	.	.	78 00	
“ Melrose	.	.	69 00	
“ Medford	.	.	48 00	
“ Peabody	.	.	267 97	
Jesse Abbott, rent	.	.	36 00	
Louisa Beers, “	.	.	24 00	
Mary Burke, “	.	.	72 00	
Mary A. Blackwell, rent	.	.	48 00	
Bridget Carroll, “	.	.	5 00	
M. Costello, “	.	.	36 00	
Timothy F. Cummings, rent	.	.	48 00	
Albert T. Clark, “	.	.	12 00	
Ellen Driscoll, “	.	.	48 00	
Edward Foster, “	.	.	48 00	
Thomas Flemming, “	.	.	24 00	
Ann Gallagher, “	.	.	60 00	
Sarah Gill, “	.	.	72 00	
Ann Grady, “	.	.	66 00	
Hannah Gallagher, “	.	.	30 00	
Michael Green, “	.	.	6 00	
S. H. Libbey, “	.	.	48 00	
John I. Loudon, “	.	.	60 00	
<i>Amounts carried forward</i>	.	.	\$6,851 11	\$17,481 77

<i>Amounts brought forward</i>	.	.	\$6,851 11	\$17,481 77
M. J. Carron, rent	“	.	48 00	
Patrick McCrossen,	“	.	48 00	
Owen McLaughlan,	“	.	104 00	
Jeremiah McCarthy,	“	.	60 00	
James McFarlane,	“	.	63 00	
Ann Nolan,	“	.	48 00	
Charles H. O’Neil,	“	.	48 00	
George K. Osgood,	“	.	21 00	
Mary O’Hare,	“	.	21 00	
M. B. Pitman,	“	.	36 00	
Emily E. Rice,	“	.	60 00	
Leander Sampson,	“	.	48 00	
Margaret Skehan,	“	.	10 00	
Olive Thomas,	“	.	72 00	
Maurice Terry,	“	.	60 00	
Frank A. Titus,	“	.	24 00	
Chester Williams,	“	.	22 00	
H. C. White,	“	.	20 00	
H. C. White, transportation of family,			29 20	
Mary Ash, board	.	.	116 00	
Mary A. Blackwell, board	.	.	250 58	
Ira Bickford, rent	.	.	60 00	
W. H. Boynton, board of paupers	.	.	121 94	
John Earl,	“	.	58 58	
William Holbrook,	“	.	60 00	
Sarah J. Hill,	“	.	184 15	
Charles Hutchinson,	“	.	52 00	
Bridget Jenkins,	“	.	113 85	
Ann Kelley,	“	.	139 03	
Hannah N. Mayo,	“	.	169 45	
Fred J. Miller,	“	.	45 00	
Ellen Nagle,	“	.	182 50	
John W. Nowlin,	“	.	19 85	
Ellen M. O’Donnell,	“	.	104 30	
E. J. Poole,	“	.	39 15	
Eugene Shea,	“	.	130 33	
Martin Toye,	“	.	104 30	
<i>Amounts carried forward</i>	.	.	\$9,644 32	\$17,481 77

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 97

<i>Amounts brought forward</i>	\$9,644 32	\$17,481 77
Almira Wilson, board of paupers	36 00	
Samuel C. Darling, transportation	3 00	
Charles S. Butters, groceries and provisions	37 50	
Charles Bartley, groceries and provisions	64 00	
A. F. Carpenter, groceries and provisions	132 78	
J. B. Eastman, groceries and provisions	27 00	
George H. Hills & Co., groceries and provisions	560 64	
D. C. Hennessey, groceries and provisions	157 00	
Knowles Bros., groceries and provisions	41 04	
A. Munroe, groceries and provisions	44 00	
John McPhillips, groceries and provisions	24 50	
Charles H. North & Co., groceries and provisions	185 00	
P. T. O'Brien, groceries and provisions	16 00	
Charles A. Small, groceries and provisions	9 00	
C. L. Stevens, groceries and provisions	10 00	
Sturtevant Bros., groceries and provisions	88 00	
Frank H. Turner & Co., groceries and provisions	83 73	
William S. Ward, groceries and provisions	281 00	
Christopher Brothers, groceries and provisions	14 00	
A. Fiske, crackers	35 04	
Henry Gray, milk	11 75	
<i>Amounts carried forward</i>	<u>\$11,505 30</u>	<u>\$17,481 77</u>

<i>Amounts brought forward</i>	.	.	\$11,505 30	\$17,481 77
H. Wellington & Co., fuel	.	.	734 49	
F. H. Mixon, stove	.	.	8 50	
Philip Eberle, boots and shoes	.	.	70 60	
Wm. J. Emerson, " " "	.	.	9 75	
John C. Gillis, " " "	.	.	27 90	
J. H. Mongan, " " "	.	.	11 75	
J. H. Brooks, dry goods	.	.	37 00	
J. W. Brine, " " "	.	.	9 00	
L. Arnold, carpenter work	.	.	11 00	
Joseph S. Brown, glazing	.	.	3 00	
Aaron R. Gay & Co., stationery	.	.	69 16	
J. O. Hayden & Co., printing	.	.	67 25	
Leach & Green, truss	.	.	3 00	
J. A. Wheeler, professional services	.	.	5 00	
Patrick McLaughlin, nursing	.	.	25 00	
Wm. J. London, expressing	.	.	1 25	
L. H. Brown, carriage hire	.	.	65 00	
R. T. Blackwell, " " "	.	.	5 00	
P. H. Wellcome, " " "	.	.	2 50	
Charles C. Folsom, salary as agent	.	.	1,149 96	
Charles C. Folsom, disbursements	.	.	98 71	
George T. Lincoln, salary as secretary	.	.	249 96	
George T. Lincoln, stamps	.	.	10 00	
J. W. Coveney, funeral expenses	.	.	6 00	
Wm. A. Flaherty, " " "	.	.	35 00	
Wm. L. Lockhart, " " "	.	.	10 00	
H. D. Litchfield, " " "	.	.	5 00	
H. B. Runey, " " "	.	.	17 75	
P. H. Rafferty & Co., " " "	.	.	78 00	
E. H. Marsh, " " "	.	.	10 00	
			<hr/>	
			\$14,341 83	
Excess and deficiency, balance to credit of account	.	.	3,139 94	
			<hr/>	
				\$17,481 77
				<hr/>

SCHOOL CONTINGENT.

CREDIT.

Appropriations, amount assessed	\$13,000 00	
Interest, transferred	695 58	
Cash, received for tuition of non-resident pupils:—		
Henry A. Atwood	\$16 00	
F. P. Bartlett	8 00	
Charles Bunting	7 50	
John D. Creelman	17 50	
Francis Hollis	71 00	
John L. W. Nichols	8 00	
William A. Snow	30 00	
Charles E. Sweet	30 00	
Mary A. Warren	25 00	
William Lamb	10 00	
Albert D. Richards	64 00	
J. H. Davis, injury to books	11 56	
		298 56
		<u>\$13,994 14</u>

DEBIT.

Cash, paid Joshua H. Davis, salary as superintendent of schools	\$2,000 02	
Joshua H. Davis, disbursements	20 12	
Janitors	4,093 65	
E. L. Robinson, truant officer	350 00	
L. H. Snow, " "	200 00	
L. H. Snow, travelling expenses	9 57	
James Mann, truant officer	49 97	
Knight, Adams & Co., books, etc.	302 70	
Leach, Shewell & Sanborn, books, etc.	377 39	
Harrison Hume, books, etc.	871 73	
Ginn & Co., "	250 48	
Harper & Brothers, "	496 60	
Adams & Ingraham, "	549 21	
F. M. Ambrose, "	123 00	
		<u>\$9,694 44</u>
<i>Amounts carried forward</i>		<u>\$13,994 14</u>

<i>Amounts brought forward</i>	.	.	\$9,694 44	\$13,994 14
Charles H. Whiting, books, etc.	.	.	287 18	
Cowperthwait & Co.,	"	.	142 89	
Carl Schoenhof,	"	.	158 04	
D. Appleton & Co.,	"	.	15 25	
A. C. Stockin,	"	.	44 30	
Willard Small,	"	.	22 35	
William Ware & Co.,	"	.	65 00	
Warren P. Adams,	"	.	93 80	
E. H. Butler & Co.,	"	.	12 00	
D. L. Guernsey,	"	.	6 00	
Thompson, Brown & Co., books, etc.	.	.	60 90	
J. L. Hammett, school supplies	.	.	133 59	
Boston School Supply Company, school supplies	.	.	71 20	
George S. Perry, school supplies	.	.	2 34	
E. J. Burt, supplies	.	.	2 37	
Frost & Adams, artists' materials	.	.	72 84	
Prang Educational Company, artists' materials	.	.	25 01	
Eagle Pencil Company, pencils	.	.	343 31	
George Frost & Co., pencil sharp- eners	.	.	14 00	
A. G. Whitcomb, ink wells	.	.	38 80	
Geo. F. King & Merrill, stationery,	.	.	250 22	
Charles C. Gerry, erasers	.	.	21 00	
N. L. Dearborn, diplomas	.	.	91 25	
C. A. French, inscribing diplomas	.	.	30 90	
George L. Baxter, disbursements	.	.	7 91	
J. S. Hayes,	"	.	4 70	
H. L. Morse,	"	.	4 94	
R. Bickford,	"	.	18 74	
George C. Nichols,	"	.	7 50	
H. C. Parker,	"	.	6 67	
G. A. Southworth,	"	.	6 50	
Carter, Rice & Co., cards	.	.	9 00	
J. O. Hayden & Co., printing	.	.	433 52	
L. Barta & Co.,	"	.	9 35	
<i>Amounts carried forward</i>	.	.	\$12,207 81	\$13,994 14

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 101

<i>Amounts brought forward</i>	. . . \$12,207 81	\$13,994 14
McDonnell Bros., advertising . . .	5 50	
E. S. Tobey, rent of post-office box,	1 00	
E. S. Daniels, tuning piano . . .	6 00	
M. L. Aldrich, copying . . .	2 60	
S. Henry Hadley, music . . .	12 08	
Thomas Young, flowers . . .	4 85	
Weeks & Potter, chemicals . . .	15 91	
Murphy, Leavens & Co.,dusters, etc.	107 48	
Oscar F. Howe, brooms, etc. . .	14 25	
Charles Holmes & Son, hardware . .	6 76	
H. W. Raymond, hardware . . .	6 44	
W. L. Snow, " . . .	10 82	
J. E. Parsons, " . . .	3 35	
Williams & Co., drinking cups . . .	7 20	
R. A. Stephens, carpenter work . . .	4 65	
J. A. McLane, posting . . .	5 60	
Rand & Byam, soap . . .	12 72	
Geo. H. Hills & Co., soap . . .	3 06	
Wm. H. Denton, oil, etc. . . .	3 34	
N. L. Pennock, " . . .	90	
J. A. Merrifield, pails . . .	1 00	
H. M. Weld, carriage hire . . .	13 00	
First Methodist Episcopal Church, use of church	100 00	
James M. Coburn, rent, etc. . . .	182 70	
D. Cummings, rent	120 00	
Joseph Gott, rent	22 50	
D. H. Rynn, rent, etc. . . .	148 45	
R. F. Thompson, rent	156 00	
T. Rafferty, rent	48 00	
R. Frahey, labor	34 90	
R. J. Whitton, labor	10 00	
Mrs. Sullivan, "	6 45	
Mrs. Sweeney, "	1 35	
Barker & Tibbetts, expressing . . .	14 35	
Walter Davis, "	4 50	
Wm. J. London, "	4 75	
<i>Amounts carried forward</i>	. . . \$13,310 27	\$13,994 14

<i>Amounts brought forward</i>	. . . \$13,310 27	\$13,994 14
No. Cambridge Express, expressing	. . . 30	
Stilphen & Co.,	" . . . 7 25	
Thorpe's Express,	" . . . 1 90	
B. H. Weeks,	" . . . 8 95	
Woodbridge & Co.,	" . . . 41 43	
Cambridge Gas Light Company, gas,	153 62	
Charlestown Gas Light Company,		
gas	58 65	
City of Boston, water	387 77	
City of Cambridge, water	24 00	
	<hr/>	\$13,994 14
		<hr/> <hr/>

SCHOOL FUEL.

CREDIT.

Appropriations, amount assessed	\$5,200 00
---	------------

DEBIT.

Cash, paid George M. Winslow & Co.,		
fuel	\$1,183 56	
B. F. Wild & Co., fuel	3,741 88	
Bishop & Brother, shavings	2 00	
Charles Booth, splitting wood	1 50	
	<hr/>	
	\$4,928 94	
Excess and deficiency, balance to credit		
of account	271 06	
	<hr/>	\$5,200 00
		<hr/> <hr/>

SCHOOLHOUSE INCIDENTALS.

CREDIT.

Appropriations, amount assessed	\$8,000 00
Interest, transferred	705 92
Cash, received of S. B. Locke & Co., old iron	26 57
	<hr/>
<i>Amount carried forward</i>	\$8,732 49

Amount brought forward \$8,732 49

DEBIT.

Cash, paid George W. Trefren, Jr., car-		
penter work	\$141	04
R. A. Stevens, carpenter work	55	43
Fred C. Fuller, " "	107	85
Melvin & Chandler, carpenter work	34	73
Harry Holt, " "	41	97
John D. Hills, " "	40	03
Leonard Arnold, " "	36	63
S. & C. H. Williams, " "	24	58
S. J. Wright, " "	14	82
R. A. Melvin, " "	7	84
A. S. Arnold, " "	7	50
R. Frary, " "	2	00
L. C. Duncklee, " "	136	50
Geo. W. Bragdon, " "	81	65
M. Elston, " "	150	00
John H. Stevens, " "	8	41
A. C. Winning, mason work	274	02
D. P. Bucknam, " "	117	25
J. M. Burckes, " "	38	21
C. E. Arnold, " "	144	50
T. J. Martin, " "	18	00
Calvin I. Sawyer, " "	5	00
A. Fisher, painting and glazing	110	08
J. H. Hollis, " " "	31	49
D. W. McDermott, painting and glaz-		
ing	6	65
J. T. Burton, painting and glazing	1	50
W. H. Denton, " " "	2	25
C. A. Legallee, plumbing	107	85
H. W. Covelle & Co., plumbing	31	15
James F. Davlin, "	10	31
Folger & Dupont, "	2	85
J. A. Durell, stove work, etc.	148	42
J. A. Merrifield, " " "	154	04

Amounts carried forward \$2,094 55 \$8,732 49

<i>Amounts brought forward</i>	\$2,094 55	\$8,732 49
Charles Holmes & Son, stove work, etc.	253 05	
Howe & Flint, stove work, etc.	44 45	
H. W. Raymond, hardware	62 23	
W. L. Snow, " "	27 30	
Whitney & Snow, " "	11 06	
A. J. Wilkinson, " "	85	
W. S. Walker, blackboards	17 60	
Henry McElwin, " "	50 00	
Carroll W. Clark, " "	29 00	
J. E. Bell, " "	49 32	
J. L. Hammett, " "	11 00	
Page & Littlefield, turning	5 33	
J. F. Ayer, lumber	28 65	
S. W. Fuller, " "	12 52	
Bishop & Bros., snow shovel	50	
L. C. Seavey, roofing	479 00	
Walter Bates, concreting	68 40	
Hasking & Montague, rent of canvas	28 37	
Samuel N. Prince, " "	16 00	
John L. Crafts, labor on High School- house roof	63 83	
I. H. Brown & Co., roofing	30 00	
W. H. Poole, gas fitting	1 50	
Cambridge Gas Light Company, piping	15 36	
Braman, Dow & Co., pipe	5 75	
Albert B. Franklin, heating appa- ratus, Bell Schoolhouse	2,395 35	
A. A. Sanborn, plans and specifica- tions	41 50	
W. W. Benjamin, plan of Grove Street	7 00	
C. Sullivan, hanging gas fixtures	2 75	
Walter H. Durell, outside windows	70 50	
J. M. Coburn, gaskets, etc.	2 15	
<i>Amounts carried forward</i>	\$5,924 87	\$8,732 49

<i>Amounts brought forward</i> . . .	\$5,924 87	\$8,732 49
George Dunbar & Co., ash barrels, etc.	50 75	
Flynn Bros, shades	20 31	
J. W. Archers, curtain	46 80	
Philander Derby & Co., furniture	15 83	
Joseph J. Giles, furniture	56 47	
D. E. Crocker, clock and repairing	14 50	
D. Cutter, " " "	5 50	
S. B. Manning, " " "	40 50	
S. J. Wood, keys, etc.	16 50	
Seward Dodge, blacksmithing	3 50	
B. F. Smith, repairing pump	3 00	
I. B. Kendall, insurance	122 50	
W. C. Crane, "	759 70	
Dexter F. Bennett, insurance	459 75	
S. H. Libby, "	85 00	
George D. Wildes, rent	297 89	
R. M. Johnson, removing night soil, N. L. Pennock, labor	76 00	
O. F. Page, labor	4 00	
George L. Borrowscale, labor	3 50	
George L. Blackbird, "	2 00	
James Deacon, "	13 12	
P. O'Connell, "	19 38	
D. H. Rinn, "	77 25	
B. F. Sheridan, "	12 00	
Thomas Young, care of lawn	3 00	
P. J. Wellcome, carriage hire	20 00	
E. R. Perham, expressing	5 00	
Walter Davis, "	19 60	
A. M. Prescott, "	7 00	
Blackall's Express, "	4 50	
Barker & Tibbetts, "	75	
Sewer assessments account, sewers in Lowell and Cherry Streets	85	
Highway betterment assessment ac- count, Evergreen Avenue	154 67	
Highways account, crushed stone	385 00	
	1 50	
	<hr/>	<hr/>
		\$8,732 49

SCHOOL TEACHERS' SALARIES.

CREDIT.

Appropriations, amount assessed	\$76,000 00
Interest transferred	4,942 26
	<hr/>
	\$80,942 26

DEBIT.

Cash, paid salaries	\$80,942 26
	<hr/> <hr/>

SCHOOLHOUSE IN WARD THREE.

CREDIT.

Appropriations, amount assessed	\$8,500 00
---	------------

DEBIT.

Cash, paid Charles Trull, land on Lowell Street	\$1,880 64	
George F. Loring, architect	320 00	
J. H. Coon & Co., on account of contract	5,600 00	
J. F. Ayer, lumber	1 72	
P. O'Connell, labor	1 50	
Water service account, service pipe,	27 88	
	<hr/>	
	\$7,831 74	
Balance to credit of account 1887	668 26	
	<hr/>	
		\$8,500 00

SCHOOLHOUSE IN WARD FOUR.

CREDIT.

Appropriations, amount assessed	\$8,500 00
Cash paid G. D. Parker, land on Cherry Street	\$1,929 60
George F. Loring, architect	320 00
J. H. Coon & Co., on account of contract	5,400 00
	<hr/>
<i>Amounts carried forward</i>	\$7,649 60
	<hr/>
	\$8,500 00

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 107

<i>Amounts brought forward</i>	\$7,649 60	\$8,500 00
J. F. Ayer, lumber	1 72	
P. O'Connell, labor	3 00	
Water service account, service pipe,	29 00	
	<hr/>	
	\$7,683 32	
Balance to credit of account 1887	816 68	
	<hr/>	
		<u>\$8,500 00</u>

TAXES.

CREDIT.

Cash, received for taxes for 1882	\$5 78	
" " " 1883	16 00	
" " " 1884	41,405 22	
" " " 1885	73,420 22	
" " " 1886	312,684 32	
	<hr/>	\$427,531 54

Real-estate liens, titles to the city for non-payment of taxes of 1884		21 58
---	--	-------

Overlay and abatement: —

Abatement on taxes for 1883	\$10 35	
" " " 1884	516 30	
" " " 1885	419 88	
" " " 1886	3,395 80	
	<hr/>	4,342 33

Balance to debit in account 1887 —

being uncollected taxes for 1882	\$3,242 98	
" " " " 1883	3,972 10	
" " " " 1884	4,226 34	
" " " " 1885	39,246 84	
" " " " 1886	100,907 16	
	<hr/>	151,595 42

\$583,490 87

DEBIT.

Balance from 1885	\$166,503 59	
Appropriations, amount assessed for current expenses	382,925 00	
State of Massachusetts, amount as- sessed for State tax	20,085 00	
	<hr/>	
<i>Amounts carried forward</i>	\$569,513 59	\$583,490 87

<i>Amounts brought forward</i> . . .	\$569,513 59	\$583,490 87
County of Middlesex, amount assessed for county tax	12,076 37	
Overlay and abatement, amount added by the assessors	1,900 91	
	<hr/>	<hr/> <hr/>
		\$583,490 87

TEMPORARY LOANS.

CREDIT.

Balance from 1885		\$175,000 00
Cash, borrowed by authority of the City Council on city notes, as follows, viz. :—		
March 3, Brewster, Cobb & Esta- brook, on eight months, at 3 per cent	\$75,000 00	
March 3, Brewster, Cobb & Esta- brook, on eight months, at 3 per cent	50,000 00	
March 31, Commonwealth of Mas- sachusetts, on eight months, at 3 per cent	125,000 00	
April 13, Commonwealth of Massa- chusetts, on eight months, at 3 per cent	75,000 00	
Dec. 6, Commonwealth of Massa- chusetts, on four months, at $3\frac{7}{8}$ per cent	75,000 00	
Dec. 13, Commonwealth of Massa- chusetts, on four months, at $3\frac{7}{8}$ per cent	75,000 00	
	<hr/>	<hr/> <hr/>
		475,000 00
		<hr/> <hr/>
		\$650,000 00

DEBIT.

Cash, paid as follows, viz. :—		
Suffolk Savings Bank, note dated Oct. 29, 1885	\$100,000 00	
	<hr/>	<hr/> <hr/>
<i>Amounts carried forward</i>	\$100,000 00	\$650,000 00

<i>Amounts brought forward</i>	\$100,000 00	\$650,000 00
Commonwealth of Massachusetts, note dated Dec. 10, 1885	75,000 00	
Commonwealth of Massachusetts, note dated March 31, 1886	125,000 00	
Suffolk Savings Bank, note dated March 3, 1886	75,000 00	
Suffolk Savings Bank, note dated March 3, 1886	50,000 00	
Commonwealth of Massachusetts, note dated April 13, 1886	75,000 00	
	<u>\$500,000 00</u>	
Balance to credit in account 1887	150,000 00	
	<u> </u>	<u>\$650,000 00</u>

WATER LOAN INTEREST.

CREDIT.

Cash, received of city of Boston, return on water rates: —			
1885, 40 per cent on	\$6,801 54	\$2,720 62	
1886, 15 “	20,000 00	3,000 00	
“ 20 “	10,000 00	2,000 00	
“ 25 “	10,000 00	2,500 00	
“ 30 “	10,000 00	3,000 00	
“ 40 “	18,231 96	7,292 78	
“ 50 “	1,863 03	931 51	
		<u> </u>	\$21,444 91

DEBIT.

Cash paid interest on water loan bonds: —			
\$14,500 one year at 5½ per cent,		\$797 50	
55,500 six months at 5½ “		1,526 25	
239,000 one year “ 5 “		11,950 00	
7,500 six months “ 5 “		187 50	
26,000 one year “ 4 “		1,040 00	
48,000 six months “ 4 “		960 00	
		<u>\$16,461 25</u>	
Less coupons unpaid		32 50	
<i>Amounts carried forward</i>		<u>\$16,428 75</u>	<u>\$21,444 91</u>

<i>Amounts brought forward</i>	\$16,428 75	\$21,444 91
Sundry persons, coupons unpaid as above	32 50	
City of Boston, proportion of amount refunded to water takers	109 90	
	<hr/>	
	\$16,571 15	
Excess and deficiency, balance to credit of account	4,873 76	
	<hr/>	
		<u>\$21,444 91</u>

WATER SERVICES.

CREDIT.

Cash, received of Roswell C. Downer, service pipe, etc.	\$38 00
E. H. Dunklee, service pipe, etc.,	13 50
Barnabus Binney, “	7 50
H. P. Hemenway, “	15 29
Albert E. Hughes, “	12 50
Erastus Clark, “	13 60
Nathan A. Fitch, “	39 75
George G. Fox, “	83 94
John Harwood, “	14 50
Addison Smith, “	38 40
Amos Keyes, “	47 20
William Lock, “	26 36
Charles H. Pierce, “	15 53
John F. Mills, “	7 50
John Wall, “	24 85
Stephen Jackman, “	7 50
Frank H. Rindge, “	35 11
Amos Haynes, “	47 65
John F. Nickerson, “	32 13
Margaret A. Simpson, “	7 96
Schoolhouse in Ward Three, account service pipe	27 88
	<hr/>
<i>Amount carried forward</i>	\$556 65

<i>Amount brought forward</i>	\$556 65	
Schoolhouse in Ward Four, account		
service pipe	29 00	
J. P. Fegan, old materials	11 20	
C. A. Legallee, pipe and fittings	1 35	
F. A. Titus, S. & W. cock	3 00	
Dalton & Ingersoll, fittings	3 54	
Watering streets account, labor and		
materials	213 54	
	<hr/>	
	\$818 28	
Water-service assessments, pipes laid,		
cost of service	5,520 21	
	<hr/>	
		\$6,338 49
DEBIT.		
Cash, paid laborers	\$2,229 50	
George K. Paul & Co., pipe	1,147 22	
W. L. Snow, " "	2 80	
George D. Goodrich, drain pipe	1 74	
Boston Lead Mfg. Company, pipe,		
etc.	229 57	
Walworth Mfg. Company, pipe and		
fittings	145 81	
Ward & Curley, fittings	372 33	
Sumner & Goodwin, " "	364 37	
Dalton & Ingersoll, " "	410 32	
Andrew J. Morse & Sons, fittings	7 50	
S. B. Locke & Co., clamps	24 34	
James P. Fegan, fittings	481 86	
Chapman Valve Mfg. Company,		
valves	51 96	
Boston Bolt Company, bolts	37 55	
Davis & Farnham, services, boxes,		
etc.	629 74	
Dodge, Haley & Co., tools	4 02	
Armstrong Mfg. Company, tools	17 85	
A. J. Wilkinson & Co., " "	4 43	
W. W. Hawkes, reel	5 00	
	<hr/>	
<i>Amounts carried forward</i>	\$6,167 91	<hr/> \$6,338 49

<i>Amounts brought forward</i>	\$6,167 91	\$6,338 49
George Cutler, screw-drivers	1 50	
Joseph Zane & Co., faucet	75	
Boston Belting Company, tubing	6 42	
Guptill & Dove, moulds	6 50	
George Sanderson, naphtha furnace,	6 00	
H. Finnegan, soldering copper	6 00	
J. A. Merrifield, plumbing	2 28	
Charles Holmes & Son, plumbing	9 46	
Fulton O'Brion, grain	9 68	
J. McCarthy's Sons, charcoal	8 40	
Barker & Tibbetts, expressing	3 25	
Wm. J. London, " "	1 25	
George D. Day, " "	15	
R. M. Hale, rebate on bill	6 00	
	<u>\$6,235 55</u>	
Water maintenance, balance transferred,	102 94	
		<u><u>\$6,338 49</u></u>

WATER SERVICE ASSESSMENTS.

CREDIT.

Cash, received of sundry persons for water services	\$5,889 27
Balance to debit in account 1887	916 92
	<u>\$6,806 19</u>

DEBIT.

Balance from 1885	\$1,285 98
Water services, service pipes laid in 1886,	5,520 21
	<u>\$6,806 19</u>

WATER MAINTENANCE.

CREDIT.

Appropriations, amount assessed	\$14,000 00
Interest, transferred	1,000 00
Water services, transferred	102 94
Cash, received of town of Arlington, clamps	\$9 60
	<u>\$9 60</u>
<i>Amounts carried forward</i>	\$15,102 94

APPENDIX TO TREASURER AND COLLECTOR'S REPORT. 113

<i>Amounts brought forward</i>	\$9 60	\$15,102 94
C. O. Achorn, part cost of laying pipe	50 00	
Charles J. Simpson, part cost of laying pipe	50 00	
McLean Asylum, pipe, labor, etc.	1,078 40	
City of Chelsea, cement-lined pipe	120 26	
Town of Winchester, tar kettle	10 00	
Town of Melrose, rolling machine and castings	604 89	
Calvin Horton, lined pipe	6 64	
J. P. Fegan, old materials	10 50	
Middlesex Bleachery, labor and materials	300 81	
E. H. Bright, clock	5 00	
James Stiles, manure	6 00	
Sewers account, pipe, labor, etc.	103 10	
New fire hydrant account, labor, pipe and fittings	311 63	
	<hr/>	2,666 83
		<hr/>
		\$17,769 77

DEBIT.

Cash, paid laborers	\$10,105 06	
Nathaniel Dennett, salary as superintendent	1,500 00	
Nathaniel Dennett, disbursements	9 50	
Sundry persons, clerical services	103 66	
Davis & Farnham, castings	825 22	
Somerville Iron Foundry, castings	233 10	
Chapman Valve Manufacturing Company, valve gates, etc.	222 03	
Coffin Valve Company, hydrant, etc.	273 60	
Pattee & Draper, hydrants	16 75	
Sumner & Goodwin, fittings	78 97	
Ward & Curley, fittings	6 00	
Boston Belting Company, washers, etc.	46 71	
	<hr/>	
<i>Amounts carried forward</i>	\$13,420 60	\$17,769 77

<i>Amounts brought forward</i>	. . \$13,420 60	\$17,769 77
Dodge, Haley & Co., steel, etc.	. . . . . 9 10	
Walworth Manufacturing Company, tools . . . . .	. . . . . 9 10	
Boston Bolt Company, bolts . . . . .	. . . . . 27 10	
Thomas Watkins, pipe joiner . . . . .	. . . . . 5 00	
Whittier Machine Company, jacket . . . . .	. . . . . 6 20	
Crosby Steam Gage and Valve Com- pany, repairing gauge . . . . .	. . . . . 1 25	
Boston Lead Manufacturing Com- pany, pipe, etc. . . . .	. . . . . 307 52	
George K. Paul & Co., pipe, etc. . . . .	. . . . . 27 32	
R. D. Wood & Co., " " . . . . .	. . . . . 451 00	
George D. Goodrich & Co., drain pipe . . . . .	. . . . . 2 28	
Medford Water Board, pipe . . . . .	. . . . . 19 20	
T. W. Norman & Co., frames . . . . .	. . . . . 7 20	
John Clary, lumber . . . . .	. . . . . 144 81	
E. D. Sawyer & Co., lumber . . . . .	. . . . . 7 62	
J. Leland, " . . . . .	. . . . . 75	
Watson Bisbee, " . . . . .	. . . . . 8 00	
George H. Sampson, powder, etc. . . . .	. . . . . 25 58	
E. I. Train & Co., " " . . . . .	. . . . . 2 00	
L. G. Burnham, cement . . . . .	. . . . . 10 80	
Sewall & Day Cordage Company, packing . . . . .	. . . . . 18 72	
Elliott, Barnes & Co., leather . . . . .	. . . . . 6 75	
A. J. Wilkinson & Co., hardware . . . . .	. . . . . 5 15	
H. W. Raymond, " . . . . .	. . . . . 103 54	
Whitney & Snow, " . . . . .	. . . . . 44 47	
Charles Holmes & Son, " . . . . .	. . . . . 2 80	
Bradley & Hastings, " . . . . .	. . . . . 18 57	
C. C. Warren, " . . . . .	. . . . . 90	
Howe & Flint, " . . . . .	. . . . . 3 60	
George H. Mason & Co., water cooler . . . . .	. . . . . 4 00	
James W. Vinal & Co., filterer . . . . .	. . . . . 2 00	
Union Glass Company, lanterns . . . . .	. . . . . 18 23	
<i>Amounts carried forward</i>	. . \$14,721 16	\$17,769 77

<i>Amounts brought forward</i>	. . . \$14,721 16	\$17,769 77
John L. Robinson, clock . . .	20 00	
Joseph J. Giles, furniture . . .	5 90	
J. B. Plummer, pails . . .	1 65	
Warren B. Plimpton, polish . . .	1 10	
C. E. Jones & Co., carriage trim- mings	3 60	
Philip Eberle, rubber boots . . .	2 75	
Charles G. Whitton, stamp . . .	3 00	
E. Spalding, harness work . . .	27 00	
Seward Dodge, blacksmithing . . .	131 95	
Charles N. Maguire, horseshoeing . . .	53 31	
Timothy O'Brine, " . . .	22 19	
J. W. Gerry, " . . .	2 25	
James Forgie & Son, collar . . .	6 00	
John E. Hill, hoof pads . . .	1 50	
W. W. Winship, tool bag . . .	2 50	
Elijah Walker, carpenter work . . .	456 67	
J. W. Gilpatrick, " " . . .	7 25	
S. T. Kirk, " " . . .	3 25	
I. H. Brown, " " . . .	90	
E. N. Buxton, painting, etc. . . .	28 50	
Bubier & Co., gutter . . .	2 70	
R. W. Willey & Co., grain . . .	380 04	
Fulton O'Brion, " . . .	46 74	
Samuel Walker & Co., oil . . .	12 70	
Spear, Gregory & Co., " . . .	10 80	
Whitney & Snow, " . . .	3 46	
Masury, Young & Co., " . . .	9 00	
E. S. Conant & Co., salt . . .	17 00	
Thomas Hollis, sponges, etc. . . .	1 50	
H. Wellington & Co., fuel and cement	176 10	
George M. Winslow & Co., fuel . . .	13 35	
B. F. Wild & Co., " . . .	17 52	
Somerset Coal Company, wiping . . .	11 50	
Globe Gas Light Company, furnace, S. J. Wood, keys	5 50	
<i>Amounts carried forward</i>	. . . \$16,221 34	\$17,769 77

<i>Amounts brought forward</i>	\$16,221 34	\$17,769 77
J. Sectorsky, brushes	2 25	
H. D. & W. S. Durgin, ice	6 00	
Cambridge Gas Light Company, gas	20 80	
New England Telephone and Telegraph Company, rentals and tolls	96 70	
Aaron R. Gay & Co., stationery	87 26	
J. O. Hayden & Co., printing	28 30	
J. H. McNamee, bookbinding	8 50	
Barker & Tibbetts, expressing	2 30	
Blackall's express, " "	75	
Thorpe's express, " "	75	
M. G. Steele, teaming	36 11	
Martin Gill, " "	76 10	
Caldwell & Staples, teaming	9 50	
J. F. Manning, " "	3 00	
Philip McGovern, labor	2 00	
F. Ivers & Son, repairing wagon	7 25	
F. E. Foster & Co., " "	11 50	
L. H. Brown, use of wagon	11 50	
E. H. Bright, ditch pump	9 00	
Charles Booth, reporting leak	2 00	
Hugh H. Herrick, " "	2 00	
City of Boston, water	16 80	
City of Boston, fittings	6 31	
Mark M. Lark, veterinary services	2 00	
Charles M. Grant, compensation for damages	30 00	
John A. Hart, compensation for damages	100 00	
Hannah Stone, compensation for damages	10 00	
Town of Melrose, rebate on bill	12 50	
City of Boston, water rates	3 28	
W. C. Crane, insurance	59 25	
	<u>\$16,885 05</u>	
Excess and deficiency, balance to credit of account	884 72	
	<u>884 72</u>	<u>\$17,769 77</u>

WATERING STREETS.

CREDIT.

Appropriation, amount assessed	\$3,000 00
Interest, transferred	40 46
Cash, received of abutters	4,891 26
	<hr/>
	\$7,931 72

DEBIT.

Cash, paid Christopher Burke, watering .	\$430 00	
T. F. Cummings, " .	240 40	
J. F. Elkins, " .	439 20	
Celia Faulkner, " .	439 00	
Martin Gill, " .	430 60	
John Hickey, " .	152 80	
Jeremiah McCarty, " .	330 40	
George McKenna, " .	463 20	
A. M. Prescott, " .	459 60	
J. J. Underhill, " .	364 40	
John Walsh, " .	433 20	
Abbott Downing Company, watering cart	425 00	
Mark Loughton, building shed .	250 00	
Richard A. Stevens, carpentering work	2 52	
Hall Rubber Company, hose . .	50 00	
Boston Belting Company, hose .	22 50	
Boston Woven Hose Company, hose,	9 90	
J. Leland, repairing carts . .	55 35	
Wm. T. Henderson, repairing carts,	15 50	
Howe & Flint, " " .	5 75	
H. G. Collins, " " .	1 50	
F. Dooris, " " .	1 50	
Seward Dodge, " " .	112 47	
E. Spaulding, " " .	75	
Stephen Buttimer, cleaning carts .	16 50	
Decker & Holton, copper work .	2 06	
	<hr/>	
<i>Amounts carried forward</i>	\$5,154 10	\$7,931 72

<i>Amounts brought forward</i>	\$5,154 10	\$7,931 72
J. H. Flitner & Co., pitch, tar, etc.,	4 37	
J. O. Hayden & Co, printing .	20 70	
Aaron R. Gay, stationery . . .	2 75	
W. C. Crane, insurance . . .	46 75	
City of Boston, water . . .	2,489 51	
Water-service account, stand-pipes, etc.	213 54	
	<hr/>	<hr/> <hr/>
		\$7,931 72

TABLE D.

BALANCES DEC. 31, 1886.

Cash	\$9,579 75	
Excess and deficiency		\$20,879 58
Funded debt		1,525,000 00
Highway betterment assessments	987 24	
Overlay and abatement		3,903 34
Overplus on tax sales		233 96
Public property	1,250,441 70	
Property and debt balance	274,558 30	
Real-estate liens	728 10	
State of Massachusetts, State aid	3,560 00	
State of Massachusetts, indigent soldiers and sailors	451 00	
Sidewalk assessments	3,446 97	
Sewer assessments	6,467 86	
Sundry persons		1,231 44
Schoolhouse in Ward Three		668 26
Schoolhouse in Ward Four		816 68
Temporary loans		150,000 00
Taxes	151,595 42	
Water-service assessments	916 92	
	<u>\$1,702,733 26</u>	<u>\$1,702,733 26</u>

REPORT

OF THE

COMMISSIONERS OF THE SINKING FUNDS.

CITY OF SOMERVILLE.

IN BOARD OF ALDERMEN, Jan. 26, 1887.

Referred to the committee on printing, to be printed in the annual reports. Sent down for concurrence.

CHARLES E. GILMAN, *Clerk*.

Concurred in.

IN COMMON COUNCIL, Jan. 27, 1887.

DOUGLAS FRAZAR, *Clerk*.

CITY OF SOMERVILLE.

IN BOARD OF COMMISSIONERS OF THE SINKING FUNDS,
Jan. 8, 1887.

To the Honorable the Mayor and the City Council of the City of Somerville :

GENTLEMEN, — The undersigned present herewith the eleventh annual report of the condition of the sinking funds of the city.

The amount of the funds, Jan. 1, 1886, as per the tenth annual report, was	\$517,158 18
The additions thereto during the year 1886 were:—	
Contribution by the city for the year	40,725 00
Interest on investments in city bonds (\$473,000 one year, and \$8,500 six months, at 5 per cent per annum, and \$40,000 one year, at 5½ per cent per annum)	26,062 50
Interest on deposit in bank	106 73
A total of	<u>\$584,052 41</u>

Invested as follows:—

In bonds of the city of Somerville (\$541,500 at 5 per cent, and \$40,000 at 5½ per cent)	\$581,500 00
On deposit in Maverick National Bank	2,552 41
	<u>\$584,052 41</u>

The several sinking funds are:—

City loan maturity of 1895	\$499,603 18
Sewer loan maturity of 1896	13,778 00
Water loan maturity of 1905	67,126 23
“ “ “ “ 1906	1,886 00
“ “ “ “ 1907	1,659 00
	<u>\$584,052 41</u>

Respectfully submitted,

NATHAN TUFTS, HENRY F. WOODS, EZRA D. CONANT,	}	Commissioners.
---	---	----------------

REPORT

OF

THE SCHOOL COMMITTEE.

CITY OF SOMERVILLE.

IN SCHOOL COMMITTEE, Dec. 27, 1886.

The superintendent submitted his annual report, which was read and accepted. It was voted that the committee adopt the report now submitted by the superintendent of public schools, and present it to their fellow-citizens as the report of the school committee for the year 1886.

J. H. DAVIS, *Secretary.*

IN BOARD OF ALDERMEN, Feb. 23, 1887.

Referred the report to the committee on printing, to be printed in the annual reports. Sent down for concurrence.

CHARLES E. GILMAN, *Clerk.*

IN COMMON COUNCIL, Feb. 24, 1887.

Concurred in.

DOUGLAS FRAZAR, *Clerk.*

BOARD OF SCHOOL COMMITTEE, 1886.

HON. MARK F. BURNS,
Mayor, Chairman, *ex officio*.

WALTER C. MENTZER,
President of the Common Council, *ex officio*.

WARD ONE.

HORACE C. WHITE, M. D.	Term expires 1886.
JOHN H. BUTLER	“ “ 1887.
S. NEWTON CUTLER	“ “ 1888.

WARD TWO.

MRS. CORNELIA B. SKINNER *	Term expires 1886.
CHARLES I. SHEPARD	“ “ 1887.
ALPHONSO H. CARVILL, M. D.	“ “ 1888.

WARD THREE.

Q. E. DICKERMAN	Term expires 1886.
WILLIAM P. HILL	“ “ 1887.
NORMAN W. BINGHAM	“ “ 1888.

WARD FOUR.

H. P. MAKECHNIE, M. D.	Term expires 1886.
MARTIN W. CARR	“ “ 1887.
PROF. BENJAMIN G. BROWN	“ “ 1888.

J. H. DAVIS,
Superintendent and Secretary.

* On account of ill-health, Mrs. Skinner resigned her position as member of the School Committee, Jan. 9. The vacancy thus occasioned was filled Jan. 20, in convention of the City Council and the School Board, by the election of James F. Beard, Esq.

STANDING COMMITTEES, 1886.

High School.

MESSRS. WHITE, BROWN, CARVILL, BINGHAM, BUTLER, DICKERMAN.

East Somerville Schools.

MESSRS. BUTLER, WHITE, CUTLER, MAYOR BURNS.

Prospect Hill Schools.

MESSRS. CARVILL, SHEPARD, MRS. SKINNER.*

Winter Hill Schools.

MESSRS. HILL, BINGHAM, DICKERMAN.

Spring Hill Schools.

MESSRS. CARR, MAKECHNIE, MENTZER.

West Somerville Schools.

MESSRS. BROWN, MAKECHNIE, CARR.

Evening Schools.

MESSRS. DICKERMAN, WHITE, BROWN, CUTLER, MRS. SKINNER.

Examination of Teachers.

MESSRS. BROWN, BUTLER, CARVILL.

Text-Books.

MESSRS. WHITE, SHEPARD, CARR, BUTLER, BINGHAM.

Repairs and Heating Apparatus.

MESSRS. CARR, SHEPARD, CUTLER, MENTZER, HILL.

School Supplies.

MESSRS. CARR, BINGHAM.

Fuel.

MESSRS. MENTZER, CARVILL, MAKECHNIE.

Music.

MESSRS. BINGHAM, WHITE, MRS. SKINNER.

Finance.

MESSRS. CARVILL, CARR.

Drawing and Penmanship.

MESSRS. DICKERMAN, BUTLER, SHEPARD.

Salaries.

MESSRS. HILL, CARVILL, BROWN, CARR, BUTLER.

Approval of Private Schools.

MESSRS. MAKECHNIE, BINGHAM, BUTLER, MRS. SKINNER.

Additional School Accommodations.

MAYOR BURNS, MESSRS. BUTLER, BINGHAM, CARVILL, CARR.

Examination of the First Class.

MESSRS. CARVILL, WHITE, MAKECHNIE, DICKERMAN.

Examination of Second Class.

MESSRS. BROWN, CUTLER.

Examination of Third Class.

MESSRS. BINGHAM, CARR.

Examination of Fourth Class.

MESSRS. BUTLER, HILL.

Examination of Fifth Class.

MESSRS. MAKECHNIE, SHEPARD.

Examination of Sixth Class.

MRS. SKINNER, MR. MENTZER.

* By vote of the Board, Jan. 25, the name of Mr. Beard was substituted for that of Mrs. Skinner on all Standing Committees of which she had been chosen a member.

BOARD OF SCHOOL COMMITTEE, 1887.

HON. MARK F. BURNS,
Mayor, Chairman, *ex officio*.

CHARLES L. NORTH,
President of the Common Council, *ex officio*.

WARD ONE.

JOHN H. BUTLER	Term expires 1887.
S. NEWTON CUTLER	“ “ 1888.
HORACE C. WHITE, M. D.	“ “ 1889.

WARD TWO.

CHARLES I. SHEPARD	Term expires 1887.
ALPHONSO H. CARVILL, M. D.	“ “ 1888.
JAMES F. BEARD	“ “ 1889.

WARD THREE.

WILLIAM P. HILL	Term expires 1887.
NORMAN W. BINGHAM	“ “ 1888.
QUINCY E. DICKERMAN	“ “ 1889.

WARD FOUR.

MARTIN W. CARR	Term expires 1887.
PROF. BENJ. G. BROWN	“ “ 1888.
HORACE P. MAKECHNIE, M. D.	“ “ 1889.

J. H. DAVIS,
Superintendent and Secretary.

STANDING COMMITTEES, 1887.

High School.

MESSRS. WHITE, BROWN, CARVILL, BINGHAM, BUTLER, DICKERMAN
BEARD, MAKECHNIE.

East Somerville Schools.

MESSRS. CUTLER, WHITE, BUTLER, BURNS.

Prospect Hill Schools.

MESSRS. SHEPARD, BEARD, NORTH, CARVILL.

Winter Hill Schools.

MESSRS. BINGHAM, DICKERMAN, HILL.

Spring Hill Schools.

MESSRS. CARR, BROWN, MAKECHNIE.

West Somerville Schools.

MESSRS. MAKECHNIE, BROWN, CARR.

Evening Schools.

MESSRS. DICKERMAN, BROWN, BEARD, CUTLER.

Examination of Teachers.

MESSRS. BROWN, BUTLER, CARVILL.

Text-Books.

MESSRS. BUTLER, SHEPARD, HILL, CARR, WHITE, BINGHAM.

Repairs and Heating Apparatus.

MESSRS. SHEPARD, CUTLER, MAKECHNIE, HILL, NORTH.

School Supplies.

MESSRS. HILL, CARR.

Fuel.

MESSRS. NORTH, MAKECHNIE, CARVILL.

Music.

MESSRS. CUTLER, BINGHAM, MAKECHNIE, BEARD.

Finance.

MESSRS. BEARD, CARR.

Drawing and Penmanship.

MESSRS. MAKECHNIE, DICKERMAN, CUTLER, SHEPARD.

Salaries.

MESSRS. CARVILL, BROWN, CARR, BUTLER, HILL.

Approval of Private Schools.

BROWN, DICKERMAN, CUTLER, BEARD.

Additional School Accommodations.

MAYOR BURNS, MESSRS. CARVILL, BROWN, WHITE, HILL.

Examination of First Class.

MESSRS. CARVILL, WHITE, MAKECHNIE, DICKERMAN.

Examination of Second Class.

MESSRS. BROWN, CUTLER.

Examination of Third Class.

MESSRS. BINGHAM, CARR.

Examination of Fourth Class.

MESSRS. BUTLER, HILL.

Examination of Fifth Class.

MESSRS. MAKECHNIE, SHEPARD.

Examination of Sixth Class.

MESSRS. BEARD, NORTH.

CITY OF SOMERVILLE.

To the School Committee of Somerville:

GENTLEMEN, — In accordance with your instructions, and in compliance with statute requirements, the following report upon the condition of the public schools of this city for the year 1886 is respectfully submitted: —

In the preparation of the report it has been my endeavor to communicate as briefly as possible, by statistics and concise statements, such facts pertaining to the schools and their various appointments as may be of general interest.

SUMMARY OF STATEMENTS.

POPULATION.

Population of the city, United States census, 1880	24,985
“ “ “ State census, 1885	29,992
Number of persons in the city between five and fifteen years of age in May last	5,296
Number between eight and fourteen years of age	3,557

VALUATION.

Valuation of the city, May 1, 1886	\$26,003,200
Real estate	\$24,124,700
Personal estate	1,878,500
Rate of taxation . . . . .	.0154
Estimated value of school property	\$413,714

EXPENDITURES FROM JAN. 1, 1886, TO JAN. 1, 1887.

BY THE SCHOOL COMMITTEE.

Salaries of teachers	\$80,942 26
“ “ janitors	4,020 32
“ “ truant officers	600 00
Salary of superintendent	2,000 00
Water	411 77
Gas	207 31
Text-books	2,322 30
Writing books	371 90
Drawing books	517 34
Printing	436 00
Stationery, and other supplies	1,774 64
Miscellaneous	1,332 56
Total expenditures	<u>\$94,936 40</u>

RECEIPTS.

Tuition of non-resident pupils	298 56
Net expenditures	<u><u>\$94,637 84</u></u>

SCHOOLHOUSES.

Two school buildings, of four rooms each, are now in process of construction, and will be ready for use early in the coming summer.

One of these buildings is located on Lowell Street in Ward Three, and the other on Cherry Street in Ward Four.

Both buildings are constructed of brick, and so constructed that they may be enlarged, without additional cost for stairs and entries, whenever enlargement may be demanded by the necessities of the neighborhoods where they are located.

The plans and specifications were furnished by Geo. F. Loring, Esq., of this city. The contractors are Messrs. J. H. Coon & Co., of Boston.

Cost of each building, exclusive of furniture and heating apparatus	\$10,500 00
Cost of land on Lowell Street, 20,806 feet	1,880 64
Cost of land on Cherry Street, 16,080 feet	1,929 60

As a token of respect for his Honor Mayor Burns, and Norman W. Bingham Esq., of the School Board, and in recognition of valuable services rendered the city by these gentlemen, in their respective places of trust, the building on Cherry Street has been named the Burns Schoolhouse, and the building on Lowell Street the Bingham Schoolhouse.

When these buildings are completed, the city will own twenty-three schoolhouses, containing one hundred and twenty schoolrooms, and seats for about six thousand pupils

During the summer vacation, steam-heating apparatus was substituted for furnaces in the Luther V. Bell Schoolhouse.

TABLE SHOWING THE NAME, LOCATION, DATE OF ERECTION, ESTIMATED VALUE, AND CAPACITY OF THE SEVERAL SCHOOL BUILDINGS.

NAME.	LOCATION.	When built.	No. of feet in lot.	Estimated value.	No. of rooms.
High	Highland Avenue	1871	—	\$41,000	9
Forster	Sycamore Street	1866	32,693	39,422	13
Prescott	Pearl Street	1867	21,444	42,000	12
Edgerly	Cross Street	1871	26,428	43,100	8
Davis	Tufts Street	1884	29,584	18,333	4
L. V. Bell	Vinal Avenue	1874	22,262	43,000	12
Cummings	School Street	1884	11,300	15,357	4
Prospect Hill	Washington Street	1848	25,313	20,600	6
Brastow	Medford Street	1861	10,019	6,250	2
Bennett	Joy Street	1868	20,560	8,300	4
Jackson	Poplar Street	1861	11,212	8,300	4
Webster	Webster Avenue	1868	11,050	8,300	4
Union	Prospect Street (Before	1842	9,360	2,600	1
Morse	Summer Street	1869	29,109	26,000	7
Beech Street	Beech Street (Purchased	1872	6,000	4,750	2
Spring Hill	Rear of Harvard Street	1850	4,991	1,700	1
Franklin	Somerville Avenue	1846	33,017	14,300	4
Harvard	Beacon Street	1851	9,810	2,600	1
Highland	Highland Avenue	1880	23,260	33,000	8
Lincoln	Broadway	1885	17,662	15,487	4
Cedar Street	Cedar Street	1843	—	800	2
Bingham	Lowell Street	1886	20,896	—	4
Burns	Cherry Street	1886	16,080	—	4
					120

TEACHERS.

During the year, ten teachers have resigned, thirteen have been elected, and two — Miss Susie A. Mattoon and Miss Kate L. O'Brien — have died. Both of these teachers were residents of this city, and graduates of our high school. They were young ladies of most estimable character, and were highly esteemed as teachers. By their fidelity, devotion, and urbanity, they won the affectionate regard of their pupils and the confidence of parents and the members of the school committee.

ELECTED.

Mr. Herbert L. Morse, principal of the L. V. Bell School.
 Mr. Horatio D. Newton, principal of the Morse School.
 Miss Lillian M. Walton, teacher in the L. V. Bell School.
 Miss Alice M. Wight, teacher in the L. V. Bell School.
 Miss Ellen M. Farnsworth, teacher in the L. V. Bell School.
 Miss Addie M. Brown, teacher in the Cummings School.
 Miss Sarah A. Tuttle, teacher in the Prospect Hill School.
 Miss Annie Sheridan, teacher in the Bennett School.
 Miss Fannie L. Gwynn, teacher in the Jackson School.
 Miss Estelle E. Patrick, teacher in the Webster School.
 Miss Nelly W. French, teacher in the Beech Street School.
 Miss Emeline S. Curtis, teacher in the Highland School.
 Miss Charlotte F. Mott, teacher in the Lincoln School.

RESIGNED.

Mr. Henry C. Parker, principal of the Morse School.
 Mr. Robert Bickford, principal of the L. V. Bell School.
 Miss Minnie H. Marden, teacher in the L. V. Bell School.
 Miss Anna M. Snow, teacher in the L. V. Bell School.
 Miss L. Gertrude McIntire, teacher in the Prescott School.
 Miss Maria L. Macurdy, teacher in the Prospect Hill School.
 Miss Helen M. Meade, teacher in the Beech Street School.
 Miss Hattie L. Furber, teacher in the Franklin School.
 Miss Alice P. Lord, teacher in the Highland School.
 Mrs. Clara J. Whittemore, teacher in the Webster School.

Mr. Bickford was elected principal of the Prescott School in September, 1851, and principal of the high school in May, 1852, which position he occupied until March, 1854, when he resigned to accept the place of principal of a high school in Roxbury. He was elected principal of the L. V. Bell School in September, 1879, and closed his connection with that school, at the end of the school year in June last.

Mr. Parker, the efficient and highly esteemed principal of the Morse School, received his appointment in September, 1884, and resigned early in the present month, to accept the place of sub-master in the Dwight School, Boston.

Mr. Morse, who succeeds Mr. Bickford, and Mr. Newton, the successor of Mr. Parker, have had several years of successful experience as principals of important schools in different sections of the State.

Whole number of teachers	120
Male teachers, 9 ; female teachers, 111.	
Number of teachers in the high school	9
Male teachers, 3 ; female teachers, 6.	
Number of teachers in the grammar schools	62
Male teachers, 5 ; female teachers, 57.	
Number of teachers in the primary schools	48
One teacher of vocal music.	
Number of teachers who are graduates of our high school,	52.
Number of teachers who are graduates of normal schools,	42.

The average term of service of our present corps of teachers is six and two thirds years.

SCHOOLS AND TEACHERS.

SCHOOLS.	TEACHERS.	SALARY.	When Elected.
High	George L. Baxter	\$2,400	1867
"	Frank M. Hawes	1,800	1879
"	Fred B. Hall	1,000	1885
"	Sarah W. Fox	1,200	1868
"	Sarah F. Litchfield	850	1880
"	Fannie W. Kaan	850	1882
"	Eudora Morey	800	1882
"	Minnie C. Clark	800	1882
"	Laura E. Giddings	800	1882
Forster	John S. Hayes	1,800	1878
"	Mary E. Northrup	675	1878
"	Mary E. Stiles	600	1883
"	Agnes L. Adams	600	1884
"	Minna L. Wentworth	600	1885
"	Frances M. Guptill	600	1869
"	Lizzie F. Clement	575	1884
"	Addie S. Winnek	575	1883
"	Alice A. Batchelor	575	1877
"	Martha H. Pennock	550	1873
"	Leila V. Colby	550	1879
"	Annie S. Gage	550	1883
"	Lizzie G. Perry	550	1878
"	Mary A. Osborne	550	1885
"	Nora F. Byard	400	1884
Prescott	G. A. Southworth	1,900	1873
"	Anna M. Bates	700	1874
"	Adelaide Reed	650	1877
"	Amy C. Hudson	600	1885
"	Abbie A. Anderson	600	1878
"	Emma M. Cate	600	1882
"	Amelia I. Sears	600	1873
"	Catharine T. Brown	575	1868
"	Clara Taylor	575	1871
"	Sarah E. Pratt	600	1877
"	Elgina M. Plummer	550	1877
"	Florence M. Morton	550	1882
Edgerly	Frank P. Hudson	800	1877
"	Harriette H. Winslow	600	1881
"	Hattie M. Pierce	575	1882
"	Fannie F. Fuller	575	1884
"	Anna L. Prescott	550	1873
"	Lillian Nealley	550	1882
"	Clara M. Bagley	550	1873
"	Ada Cowles	550	1875
Davis	Lucretia A. Burns	625	1882
"	Florence A. Robinson	550	1883
"	Gertrude A. Earle	400	1884
"	Priscilla A. Merritt	475	1885

SCHOOLS AND TEACHERS. — *Continued.*

SCHOOLS.	TEACHERS.	SALARY.	When Elected.
Luther V. Bell	Herbert L. Morse	\$1,600	1885
"	Abbie C. Hunt	675	1873
"	May E. Berry	675	1880
"	Lillian M. Walton	600	1886
"	Hattie E. Adams	600	1885
"	Ellen M. Gooding	600	1868
"	Alice M. Wight	525	1886
"	Fannie A. Wilder	600	1874
"	Emma F. Schuh	600	1874
"	Nellie A. Hamblin	600	1882
"	Ellen M. Farnsworth	575	1886
"	Elvira Morrill	575	1884
"	Eliza L. Schuh	550	1882
Cummings	Lydia J. Page	625	1869
"	Addie M. Brown	325	1886
"	Augusta M. Houghton	550	1877
"	Annie Coffin	400	1884
Prospect Hill	Helen Tinker	700	1872
"	Sarah A. Tuttle	300	1886
"	Ellen Ledyard	575	1874
"	Mary B. Currier	550	1873
"	Lucy E. Clark	400	1884
"	Charlotte I. Houghton	550	1872
Brastow	Maria Miller	575	1870
"	Helen M. Dodge	400	1884
Bennett	Mary B. Smith	625	1885
"	Lizzie W. Parkhurst	550	1885
"	Annie Sheridan	300	1886
"	Isadore E. Taylor	475	1883
Jackson	Annie E. McCarty	625	1880
"	Fannie L. Gwynn	300	1886
"	Lena G. Allen	400	1884
"	Annie E. Crimmings	400	1884
Webster	Alice I. Norcross	625	1885
"	Estelle E. Patrick	550	1886
"	Annie L. Savage	550	1873
Union	Isabella M. Prince	550	1876
Morse	Horatio D. Newton	1,600	1886
"	Mina J. Wendell	675	1882
"	Stella Hall	600	1884
"	Pauline S. Downes	600	1872
"	Anna E. Sawyer	600	1873
"	Ella F. Gould	600	1882
"	Mary A. Haley	575	1868
"	Laura J. Brooks	575	1883
"	Minnie S. Turner	325	1885
Beech Street	Mary E. Bosworth	600	1882
"	Nelly W. French	550	1886
Spring Hill	Bertha L. Emerson	550	1885

SCHOOLS AND TEACHERS. — *Concluded.*

SCHOOLS.	TEACHERS.	SALARY.	When Elected.
Franklin	Hattie A. Hills	\$650	1874
“	Emeline C. Summerhayes	575	1876
“	Anna C. Damon	550	1879
“	Caroline S. Plimpton	550	1859
Harvard	Annie E. Robinson	550	1876
Highland	George E. Nichols	1,700	1877
“	Lilla A. Hayward	675	1881
“	Alice E. Gage	600	1884
“	Evelyn E. Getchell	600	1885
“	Florence N. Robbins	600	1885
“	S. Adelaide Blood	575	1882
“	Annie R. Cox	575	1883
“	Sarah E. Pray	550	1878
“	Emeline S. Curtis	475	1886
“	Hallie M. Wood	550	1884
“	Annie L. Browne	400	1885
Lincoln	Mary A. Paul	625	1879
“	Jennie Colburn	575	1875
“	Charlotte F. Mott	550	1886
“	Annie C. Thayer	325	1885
Cedar Street	Alice Simpson	550	1872
“	Alice M. Porter	550	1880
Teacher of Music	S. H. O. Hadley	1,333	1868

PUPILS.

Number of pupils in attendance January	5,141
Estimated number of persons in the city between five and fifteen years of age, on the first day of May last	5,296
Estimated number between eight and fourteen years of age	3,557
Number in attendance in December	5,317
In the high school	363
In the grammar schools	2,638
In the primary schools	2,316
Number over fifteen years of age in December	558
In the high school	324
In the grammar schools	232
Whole number registered during the year	6,350
In the high school	520
In the grammar schools	2,767
In the primary schools	3,063

TABLE

SHOWING THE NUMBER OF PUPILS IN EACH OF THE THIRTEEN CLASSES IN DECEMBER, THE AVERAGE AGE OF PUPILS IN EACH CLASS, AND THE PER CENT THAT THE NUMBER IN EACH CLASS IS OF THE NUMBER IN ALL THE CLASSES.

GRADE.	Class.	Boys.	Girls.	Total.	Average Age.	Per Cent.
High . . .	First . . .	15	42	57	18 years, 5 mos.	1.07
" . . .	Second . . .	25	44	69	17 " 6 "	1.30
" . . .	Third . . .	36	64	100	16 " 4 "	1.88
" . . .	Fourth . . .	65	72	137	15 " 8 "	2.58
Grammar . . .	First . . .	118	127	245	14 " 9 "	4.61
" . . .	Second . . .	136	162	298	14 " 0 "	5.60
" . . .	Third . . .	219	199	418	13 " 1 "	7.86
" . . .	Fourth . . .	284	240	524	12 " 5 "	9.85
" . . .	Fifth . . .	312	233	545	11 " 6 "	10.25
" . . .	Sixth . . .	346	262	608	10 " 6 "	11.44
Primary . . .	First . . .	360	270	630	9 " 3 "	11.85
" . . .	Second . . .	356	325	681	7 " 10 "	12.81
" . . .	Third . . .	580	425	1,005	6 " 4 "	18.90
		2 852	2,465	5,317		100.00

ATTENDANCE.

Average whole number in all the schools for the year	4,984.7
high school	349.5
grammar schools	2,447.4
primary schools	2,187.8
Average attendance in all the schools for the year	4,678.0
high school	333.3
grammar schools	2,328.4
primary schools	2,016.3
Per cent of attendance in all the schools for the year	93.8
high school	95.4
grammar schools	95.1
primary schools	92.2
Number of tardinesses in all the schools for the year	2,834
high school	392
grammar schools	1,019
primary schools	1,423

Number of dismissals in all the schools for the year	2,509
high school	571
grammar schools	1,284
primary schools	654

Our city has always made ample provision for the education of all persons of school age within its limits; but either from inability or disinclination, large numbers do not avail themselves of the opportunities liberally furnished them for securing an education and all the benefits which might accrue.

Our statistics show that only about ninety per cent of all persons in the city between five and fifteen years of age are in school at any given time; that only thirty per cent of our pupils complete the course of study prescribed for the grammar schools; that only sixty-five per cent of the grammar-school graduates enter the high school; and that only forty-two per cent of those who enter the high school complete the entire public school course, and receive diplomas of graduation. It will be seen by reference to the table on page 139, that more than one half of all the pupils in the thirteen classes constituting the schools, are in the primary schools and the sixth class of the grammar schools.

TRUANCY.

We ascertain from the monthly reports of the truant officers that, of the seven hundred and sixty-four absentees whose cases were investigated, three hundred and thirty-four were found to be truants. Three habitual truants have been sent to the House of Reformation in Lowell.

The number of cases of truancy reported does not indicate the actual number of truants, since pupils frequently repeat their offence, and their names recur in different reports. But the prevalence of truancy is sufficient to awaken solicitude, and the magnitude of the evils resulting therefrom should lead to the adoption and exercise of all precautionary measures at our disposal. We must labor earnestly to make the schools attractive as well as profitable, and diligently employ all available moral influences to secure greater regularity of attendance and to diminish the number of truants. Truant officers can exert a restraining influence by their vigilance, and by frequent visits to the homes of delinquents and to the by-places where they are prone to resort.

In the treatment of truants, firmness should be accompanied by kindness. As a rule, truants are unfortunate in their homes and all their surroundings, and, not infrequently, are "more sinned against than sinning." Herbert Spencer says: "We do not hesitate to say that to parental misconduct is traceable a great part of the domestic disorder commonly ascribed to the perversity of children." In dealing with the unfortunate and the erring we should refrain from appeals to processes of law, until all other means prove ineffectual, and should avoid whatever tends to diminish self-respect and the respect of others. It has been wisely said, "The first step downward is to sink in the estimation of others; the next and fatal step is to sink in one's own estimation."

SCHOOLS.

Whole number of schools	104
High school	1
Grammar schools	56
Primary schools	47

The first class in the Luther V. Bell schoolhouse occupies two schoolrooms, but it is regarded as one school in this enumeration.

PRIMARY SCHOOLS.

One primary school was established in the basement of the Morse Schoolhouse in September.

Number of primary schools	47
Number of pupils in attendance in January	2,244
Number admitted during the year	819
Number promoted to the grammar schools	487
Number in attendance in December	2,316

Boys, 1,296 ; girls, 1,020.

Average number to a teacher, at the present time	49
Whole number registered during the year	3,063

The primary schools are in a satisfactory condition. Many of them may be regarded as model schools. Pupils are making commendable progress in school work, and are learning the "cardinal lessons of punctuality, promptness, cleanliness, silence, industry, self-control, attention, and application." Their school life is made enjoyable as well as profitable, and they are acquiring a fondness for school and its duties.

EXHIBIT OF THE PRIMARY SCHOOLS.

SCHOOLS.	TEACHERS.	Average Whole No.	Average Attendance.	Per Cent of Attendance.	Tardinesses.	Dismissals.
Forster	M. H Pennock . . .	43.0	40.2	93.5	8	5
"	L. V. Colby . . .	41.0	39.0	95.1	7	6
"	A. S. Gage . . .	47.0	43.6	92.8	5	4
"	L. G. Perry . . .	92.1	84.4	91.7	13	3
"	N. F. Byard . . .	43.3	40.6	93.9	4	16
Prescott	S. E. Pratt . . .	46.5	43.7	94.1	4	11
"	E. M. Plummer . . .	44.5	40.9	91.9	6	14
"	F. M. Morton . . .	58.0	54.2	93.5	10	4
Edgerly	A. L. Prescott . . .	47.8	45.6	95.3	7	7
"	Lillian Nealley . . .	48.0	45.2	94.2	10	12
"	C. M. Bagley . . .	44.2	40.7	92.1	12	4
"	Ada Cowles . . .	45.1	39.2	87.0	23	4
Davis .	F. A. Robinson . . .	37.2	35.2	94.5	19	16
"	G. A. Earle . . .	42.1	38.7	91.9	17	9
"	P. A. Merritt . . .	50.9	47.0	92.2	21	4
L. V. Bell	E. L. Schuh . . .	43.3	39.9	92.3	9	4
Cummings	A. M. Brown . . .	50.3	46.4	92.2	43	16
"	A. M. Houghton . . .	54.4	49.1	90.2	30	1
"	Annie Coffin . . .	47.7	43.0	90.1	10	22
Prosp't Hill,	M. B. Currier . . .	56.4	52.6	93.2	24	17
"	L. E. Clark . . .	45.4	42.2	92.9	21	43
"	C. I. Houghton . . .	44.6	40.1	90.0	38	13
Brastow	H. M. Dodge . . .	48.9	45.6	93.3	19	15
Bennett	L. W. Parkhurst . . .	45.5	42.3	92.9	41	10
"	Annie Sheridan . . .	46.2	42.1	91.0	63	24
"	I. E. Taylor . . .	55.2	49.1	88.9	57	8
Jackson	F. L. Gwynn . . .	44.6	40.7	91.2	90	22
"	L. G. Allen . . .	47.1	43.2	91.6	104	5
"	A. E. Crimmings . . .	59.4	55.4	93.2	153	0
Webster	C. J. Whittemore . . .	32.2	30.0	93.1	85	38
"	A. L. Savage . . .	49.0	46.6	95.1	58	22
Union	I. M. Prince . . .	54.2	51.0	94.1	13	2
Morse	M. S. Turner . . .	28.5	26.0	91.2	10	13
Beech Str't,	M. E. Bosworth . . .	38.2	36.2	94.8	6	19
"	H. M. Meade . . .	41.7	39.2	94.0	14	23
Spring Hill,	B. L. Emerson . . .	48.6	45.5	93.7	36	31
Franklin	A. C. Damon . . .	42.0	38.2	90.9	39	28
"	C. S. Plimpton . . .	58.2	56.1	96.3	29	14
Harvard	A. E. Robinson . . .	44.0	40.5	92.0	72	25
Highland	S. E. Pray . . .	49.6	46.4	93.6	40	4
"	E. S. Curtis . . .	48.7	44.3	91.4	19	13
"	H. M. Hood . . .	36.6	33.0	90.0	22	10
"	A. L. Browne . . .	28.6	25.6	89.6	12	23
Lincoln	C. F. Mott . . .	43.3	39.5	91.2	3	9
"	A. C. Thayer . . .	48.6	42.2	86.9	17	4
Cedar Str't.	Alice Simpson . . .	39.7	35.5	89.4	35	47
"	A. M. Porter . . .	36.4	30.6	84.1	45	10
Total	. . . . .	2,187.8	2,016.3	92.2	1,423	654

GRAMMAR SCHOOLS.

The customary exhibitions of the grammar schools were omitted at the close of the school year. Near the end of the year, a day was appointed on which every school in the city was open to the inspection of parents and others interested. On that day all specially arranged exercises were prohibited, and the regular daily work of the schools was exhibited.

At the close of the year all graduates of the several grammar schools assembled in one place, and received from the city the diplomas to which they were entitled.

The occasion on which the graduates received their diplomas was one of unusual interest, as may be inferred from the following programme of exercises : —

GRAMMAR SCHOOL GRADUATES' DAY.

THURSDAY, JULY 1, AT 7 O'CLOCK P. M.

ORDER OF EXERCISES.

- | | |
|--|--|
| 1. PRAYER. | REV. GEORGE W. DURRELL. |
| 2. SINGING. — “Gloria — 12th Mass.” | <i>Mozart.</i> |
| 3. ADDRESS. | HIS EXCELLENCY GOV. GEORGE D. ROBINSON. |
| 4. SINGING. — “Forsaken.” | <i>Koschat.</i> |
| 5. ADDRESS. | HON. SELWYN Z. BOWMAN. |
| 6. SINGING. — “Night sinks on the Wave.” | <i>Smart.</i> |
| 7. ADDRESS. | REV. ELMER H. CAPEN, President of Tufts College. |
| 8. PRESENTATION OF DIPLOMAS. | MAYOR MARK F. BURNS. |
| 9. SINGING. — “Protect us through the Coming Night.” | <i>Curschmann.</i> |

LUTHER V. BELL SCHOOL.

DISTRICT COMMITTEE.

ALPHONSO H. CARVILL, M. D. CHARLES I. SHEPARD. JAMES F. BEARD.

Principal, ROBERT BICKFORD.*Sub-Master*, HERBERT L. MORSE. *Assistant*, ABBIE C. HUNT.

GRADUATES.

Clarence C. Bartlett.	Frances M. Broadhead.
Walter E. Barton.	Edith I. Cann.
Joseph B. Belliveau.	May G. Canfield.
James A. Campbell.	Nora A. Cavanaugh.
George A. Clark.	Maude T. Cowdin.
Walter M. Daniels.	Grace P. Caswell.
George E. Davis.	Sarah L. Davis.
Nathaniel J. Doane.	Cordelia A. Foster.
Charles A. Draper.	Bertha A. Gould.
Willard H. Everton.	Mary E. Gorman.
Frederick W. Fitts.	Carrie L. Grant.
Hiram A. Gillett.	Maria T. Hollander.
Henry Y. Gleason.	Hattie N. Hayden.
Robert D. Graham.	Isabella M. Horrell.
George E. Howe.	Anna Kenny.
Frank S. Hight.	Edith G. Merrill.
Harry M. Haven.	May F. Marshall.
John E. Haulon.	Maggie A. McConnell.
George Harris.	Onata I. North.
Warren D. Holt.	Alice M. Paine.
William J. Kaula.	Emma J. Parker.
Thomas D. McClosk�y.	Bertha E. Place.
Carl E. Merrill.	Leila I. Primus.
Dennis F. O'Connell.	Laura E. Parmenter.
William H. O'Connell.	Maggie L. Phillips.
William H. Rinn.	Millie E. Randall.
Charles E. Souther.	Nellie L. Russell.
Lillian S. Allen.	Clara B. Snow.
Georgia P. Austin.	Mary A. Sheridan.
Bertha L. Bartlett.	Flora M. Twitchell.
Mary Bayfield.	Edith M. Walker.
Martha E. Burrows.	Florence E. Whitman.
Carrie F. Bent.	Jennie Webb.

 PRESCOTT SCHOOL.

 DISTRICT COMMITTEE.

HON. JOHN HASKELL BUTLER.

S. NEWTON CUTLER.

HORACE C. WHITE, M. D.

Principal, G. A. SOUTHWORTH.
Assistants, ANNA M. BATES, ADELAIDE REED.

GRADUATES.

Charles A. Battelle.
 Walter T. Bisbee.
 Herbert E. Buffum.
 John L. Butler.
 Edward L. Chase.
 Henry E. Coan.
 Arthur S. Davis.
 Frank R. Dunklee.
 Charles E. Giles.
 John E. Goldthwait.
 G. Ernest Griffin.
 Henry K. Hadley.
 John C. Hazelton.
 Peter J. Hill.
 Charles E. Hughes.
 Freeman L. Lowell.
 John G. McCarthy.
 Howard A. McIntire.
 Leslie Moore.
 Charles L. Morrill.
 William B. Osgood.
 Arthur N. Park.
 Henry W. Pratt.
 T. Franklin Preston.
 Arthur B. Roberts.
 Frank S. Sargent.
 I. Hartwell Staples.
 George L. Sullivan.
 Howard A. Weston.
 William H. White.
 Frank Winslow.

Grace L. Atkins.
 Blanche B. Bassett.
 Belle M. Benner.
 Maude Burns.
 Belle Burns.
 Edith A. Chapman.
 Lillian E. Chauncey.
 Emma L. Colby.
 Agnes W. Crosby.
 Lillian G. Daley.
 Zenobia H. Daniels.
 Beulah E. Davis.
 Allie B. Ellis.
 Alice M. Emerson.
 Alice L. Fisher.
 Alice M. Grillis.
 Rosella W. Gould.
 Maude Jones.
 Lottie M. Leonard.
 Alice M. Libby.
 Kezia J. Meredith.
 Alice M. Nickerson.
 Mary E. Nickerson.
 E. Lula Rich.
 Marion I. Thompson.
 Frances R. Tainter.
 Bertha Underhill.
 Mary Louise Webb.
 Bessie M. Wood.

FORSTER SCHOOL.

DISTRICT COMMITTEE.

WILLIAM P. HILL. QUINCY E. DICKERMAN. NORMAN W. BINGHAM.

Principal, JOHN S. HAYES.

Assistant, MARY E. NORTHUP.

GRADUATES.

Harry A. Barnes.
 John P. Burke.
 Alfred L. Dodd.
 John D. Flynn.

William H. Hilling.
 Sydney H. Jaques.
 Charles F. Maguire.
 George H. Maynard.

Lawrence A. Murphy.
 Edwin G. Osgood.
 Horace D. Phelps.
 Aldis D. Rines.
 William A. Wilkins.
 Edgar M. Young.
 Honora M. Buttimer.
 Mattie L. Coan.
 Helen V. Grey

Nettie F. Gray.
 Eliza T. Hollis.
 Josie F. A. Hopkins.
 Carrie T. Lincoln.
 Josephine T. Mack.
 Edith R. Morris.
 Constance C. Pelham.
 Alice G. Pelham.
 Grace Shorey.

MORSE SCHOOL.

DISTRICT COMMITTEE.

MARTIN W. CARR.

PROF. BENJ. G. BROWN.

HORACE P. MAKECHNIE, M. D.

Principal, HENRY C. PARKER.

Assistant, MINA J. WENDELL.

GRADUATES.

William E. Bucknam.
 Fred M. Carr.
 Edward L. Child.
 Edward H. Daniels.
 Arthur C. Dyer.
 Huntie Gordon.
 John B. Merrifield.
 Arthur C. Morang.
 Edward F. McGarr.
 Guy H. Proctor.
 George F. Sibley.
 George R. Windsor.

May E. Bridge.
 Lulu J. Deacon.
 Evelyn F. Folan.
 M. Edith Frost.
 Nellie S. Fogg.
 Hannah M. Higgins.
 Edith L. Hummewell.
 Lulu W. Mathers.
 Marion M. Perkins.
 Gertrude M. Smith.
 Addie E. Woodcock.

HIGHLAND SCHOOL.

DISTRICT COMMITTEE.

PROF. BENJ. G. BROWN.

HORACE P. MAKECHNIE.

MARTIN W. CARR.

Principal, GEORGE E. NICHOLS.

Assistant, LILLA A. HAYWARD.

GRADUATES.

William I. Bevins.
 Arthur D. Flitner.
 Fred C. Hoyt.

Osgood H. Lacount.
 Alfred C. Nash.
 Harry C. Skinner.

Norman W. Stearns.
 Harry G. Waters.

 Adelaide L. Burton.
 Suzella Cummings.
 Ada E. Dodge.
 Addie I. Downs.
 Abbie G. Fish.
 Emma F. Gerry.

Elizabeth A. Lambert.
 Gertrude M. Muzzey.
 Edith M. Sears.
 Annie L. Shedd.
 Mabel E. Townsend.
 Annie E. Waters.
 Florence L. Wilson.
 Bessie W. Yeaton.

Whole number of graduates 193
 Boys, 92 ; Girls, 101.

From the L. V. Bell School, 62 : boys, 27 ; girls, 35.
 " " Prescott " 60 : boys, 31 ; girls, 29.
 " " Forster " 26 : boys, 14 ; girls, 12.
 " " Morse " 23 : boys, 12 ; girls, 11.
 " " Highland " 22 : boys, 8 ; girls, 14.

One hundred and thirty-three graduates from the grammar schools entered the high school in September : boys, 57 ; girls, 71.

From the L. V. Bell School, 44 : boys, 16 ; girls, 28.
 " " Prescott " 38 : boys, 21 ; girls, 17.
 " " Highland " 17 : boys, 6 ; girls, 11.
 " " Morse " 16 : boys, 9 ; girls, 7.
 " " Forster " 13 : boys, 5 ; girls, 8.

Number promoted to the first class in June 234
 " " " second " " 322
 " " " third " " 392
 " " " fourth " " 396
 " " " fifth " " 489
 " " " sixth " " 487

Eighty-seven per cent of all pupils in the grammar schools were promoted in June.

Number of grammar schools 57
 Number in attendance in January 2,532
 Number received from the primary schools 487
 Number in attendance in December 2,638
 Average number to a school 47
 Number over fifteen years of age 232
 Number registered during the year 2,767

We can speak of our grammar schools in terms of high commendation. They are all in charge of competent, earnest, faithful teachers, who are perfectly conversant with the requirements of their respective grades, and are doing thorough, substantial, and satisfactory work.

EXHIBIT OF THE GRAMMAR SCHOOLS.

SCHOOLS.	TEACHERS.	Aver. whole Number.	Average Attendance.	Per Cent of Attendance.	Tardinesses.	Dismissals.
Forster	J. S. Hayes . . .	28.1	26.9	95.9	0	1
"	M. E. Stiles . . .	38.3	36.7	95.8	0	11
"	A. L. Adams . . .	42.1	39.8	94.3	1	11
"	M. L. Wentworth . . .	33.9	32.1	94.9	2	6
"	F. M. Guptill . . .	42.1	39.5	93.9	4	8
"	L. F. Clement . . .	46.6	44.2	95.0	4	16
"	A. S. Winnek . . .	39.8	38.0	95.3	5	14
"	A. A. Batchelor . . .	51.8	48.8	94.2	7	15
Prescott	G. A. Southworth . . .	62.1	60.4	97.2	3	2
"	Adelaide Reed . . .	34.5	33.1	95.9	3	6
"	A. C. Hudson . . .	33.1	31.9	96.4	2	10
"	A. A. Anderson . . .	41.9	40.1	95.7	0	5
"	E. M. Cate . . .	42.0	40.2	95.5	1	14
"	A. I. Sears . . .	46.6	44.1	94.7	2	12
"	C. T. Brown . . .	50.9	48.2	94.7	2	20
"	Clara Taylor . . .	53.1	50.3	94.7	11	21
Edgerly	F. P. Hudson . . .	39.9	38.8	97.1	2	1
"	H. H. Winslow . . .	40.7	39.2	96.4	3	14
"	H. M. Pierce . . .	43.0	41.1	95.6	4	5
"	F. F. Fuller . . .	48.4	46.2	95.4	7	7
Davis	L. A. Burns . . .	40.0	38.0	95.0	9	26
L. V. Bell	H. L. Morse . . .	72.6	69.6	95.8	35	56
"	L. M. Walton . . .	37.1	36.2	97.4	29	7
"	H. E. Adams . . .	44.1	41.7	94.6	23	79
"	E. M. Gooding . . .	44.7	42.6	95.2	33	16
"	A. M. Wight . . .	47.9	46.0	96.0	34	35
"	F. A. Wilder . . .	44.2	42.2	95.5	15	12
"	E. F. Schuh . . .	41.4	39.7	95.9	8	15
"	N. A. Hamblin . . .	44.7	41.8	93.5	48	9
"	E. M. Farnsworth . . .	52.2	49.6	95.0	33	13
"	Elvira Morrill . . .	46.5	44.2	94.9	39	29
Cummings	L. J. Page . . .	47.4	45.6	95.9	19	16
Prosp't Hill,	Helen Tincker . . .	44.1	41.8	92.4	10	10
"	S. A. Tuttle . . .	45.7	43.4	94.9	17	7
"	Ellen Ledyard . . .	45.8	42.4	92.5	34	27
Brastow	Maria Miller . . .	44.1	42.2	95.7	11	32
Bennett	M. B. Smith . . .	46.2	42.2	91.3	115	79
Jackson	A. E. McCarty . . .	43.4	41.7	96.1	41	26
Webster	A. I. Norcross . . .	34.6	32.8	94.7	85	34
Morse	H. D. Newton . . .	30.9	30.1	97.4	14	27
"	Stella Hall . . .	43.0	40.9	95.1	12	55

EXHIBIT OF THE GRAMMAR SCHOOLS. — *Concluded.*

SCHOOLS.	TEACHERS.	Aver. whole Number.	Average Attendance.	Per Cent of Attendance.	Tardinesses.	Dismissals.
Morse	P. S. Downes . . .	47.9	46.5	97.2	4	7
"	A. E. Sawyer . . .	47.6	45.1	94.6	33	26
"	E. F. Gould . . .	46.0	44.6	96.9	39	36
"	M. A. Haley . . .	49.5	46.8	94.5	37	20
"	L. J. Brooks . . .	34.5	33.3	96.0	12	13
Franklin	H. A. Hills . . .	32.0	30.2	94.4	30	22
"	E. C. Summerhayes . . .	37.8	35.6	94.1	42	13
Highland	G. E. Nichols . . .	38.9	37.6	96.5	1	28
"	A. E. Gage . . .	46.0	44.1	95.7	3	30
"	Jennie Colburn . . .	48.6	45.3	93.2	8	56
"	F. N. Robbins . . .	48.6	44.9	92.4	9	70
"	S. A. Blood . . .	49.7	45.8	92.2	37	88
"	A. R. Cox . . .	48.3	45.6	94.3	4	15
Lincoln	M. A. Paul . . .	30.7	29.2	95.2	2	33
"	E. E. Getchell . . .	41.8	39.5	94.5	31	18
Total	. . . . .	2,447.4	2,328.4	95.1	1,019	1,284

HIGH SCHOOL.

Whole number of different pupils during the year	520
Largest number at one time	374
Number admitted during the year	146
" from our grammar schools	133
" from other schools	13
" graduated	56
" of graduates who entered college	13
" " " " " Mass. Agr'l College	1
" " " " " U. S. Naval Academy at Annapolis	1
Number of graduates who entered Institute of Technology	3
" who have left the school during the year, exclusive of graduates	101
Whole number at the present time	363
Average number to a teacher	40
Number over fifteen years of age	324
" in course preparatory to college	96
" pursuing the regular course	195

Number pursuing the English course	72
“ in the first class on entering the school	96
“ at the present time	57
“ in the second class on entering the school	122
“ at the present time	69
“ in the third class on entering the school	170
“ at the present time	100
“ in the fourth class on entering the school	140
“ at the present time	137

The high school maintains a firm hold upon public confidence and regard. It is held in high esteem by our citizens, not only for what it accomplishes directly for its members, but also for its elevating influence upon all other schools in the city. It has been said by one occupying a high position as an educator: “Experience has proved that elementary education flourishes most where provision for higher education is most ample. If the elementary schools of Germany are the best in the world, it is owing, in a great measure, to the fact that the higher schools are accessible to all.”

We cordially welcome to the school the large number of pupils who enter it from the grammar schools, and regard it a cause for congratulation that the number of graduates, and of those who pursue the course preparatory to college, is annually increasing.

Fifty per cent of the pupils who entered the school in September, 1882, graduated at the close of the school year in June last. Thirteen of the graduates joined their classes in college in September, — four at Harvard, one at Tufts, three at Boston University, one at Smith, one at Wellesley, one at Amherst, one at Brown, one at Williams. Three entered the Institute of Technology, one the Massachusetts Agricultural College, one the United States Naval Academy at Annapolis.

Herbert Spencer says: “To prepare for complete living is the function which education has to discharge; and the only rational mode of judging of any educational course is, to judge in what degree it discharges such function.” Most young persons aspire to some useful and remunerative employment as their life-work, and are entitled to such education as will give the best preparation for its successful prosecution. Whenever marked tendencies to special avocations are exhibited, they should be encouraged, for

decided preferences are indications of ability and adaptation, and are guarantees of success.

The three courses of study — English, Regular, and Preparatory to College — pursued in the school present a wide range of subjects, and furnish opportunity to prepare for any contemplated pursuit.

From various causes, the number of persons who obtain a liberal education is comparatively small; but we strongly urge its pursuit and attainment wherever there exist marked ability, decided fondness for study, and favoring circumstances. An eminent educator has said: "It is not for the sake of the individual alone that liberal education is needed. Nothing adds so much to the respectability, the security, and rational enjoyment of a people, as a large infusion of this element."

Formerly, the studies which constituted a liberal education were chiefly the classics, mathematics, and logic; but at the present time, the field of knowledge is so vast, and branches of study are so numerous, the student who aims to obtain a liberal education may well hesitate before he makes his selections. If, however, his calling in life is chosen, that will determine, in a measure, his choice.

In regard to the selection of studies, the venerable Ex-President of Williams College says: "Some option there should be, especially in the latter part of the course, and in outlying branches of study; but I would admit of no such range of option as to make graduation possible with the omission of the most essential parts of a liberal education. Nor would I, by the range of option, so vacate the college degree of any definite meaning as to preclude the possibility of having, as we now have, a body of liberally educated men throughout the country, standing on essentially the same ground."

In regard to the study of the ancient classics, President Dwight, of Yale College, in his inaugural, says: "No man who has learned to read Homer and Demosthenes in any measure as he would read the best English or German authors, has ever regretted it. No man who has ever learned, through the knowledge of the Greek language, to appreciate in any measure the poetry or oratory or philosophy of Greece, has grieved over the hours spent in gaining that knowledge. I do not believe that any such man to the end of time will ever have such grief or regret, or will be otherwise than

thankful that his mind was thus lifted above the one work of his daily life. The disputes about education, which have filled the air for the last few years, are not yet ended. It will be a strange thing in the world's history if, in this regard, the permanent future does not find its fountain of life in the permanent past."

THIRTY-FOURTH ANNUAL EXHIBITION OF THE SOMERVILLE
HIGH SCHOOL, TUESDAY, JUNE 29, 1886, AT 9 A. M.

ORDER OF EXERCISES.

- SINGING*—ANTHEM: "Lift up your heads." *Glück.*
(With orchestra and organ.)
FOUR-PART SONG: "The Stars are shining in
heaven." *Rheinberger.*
1. SALUTATORY IN LATIN. ARTHUR C. BALDWIN.
2. ESSAY. *Possible Inventions.* KATHARINE L. BINGHAM.
3. READING. The First Quarrel. *Tennyson.*
ELIZA E. PAIGE.
- SINGING.—DUET: Quis est homo, "Stabat Mater." *Rossini.*
4. READING. The Last Banquet. *Renaud.*
FRED E. DAVIS.
5. DIE ANKUNFT. (Original.)
E. FLORENCE CROSBY. RUTH D. LORING.
E. GERTRUDE WOODBURY. WILLARD C. ALDRICH.
6. READING. Aunt Anniky. *Harper's.*
FRED H. MERRIFIELD.
- SINGING.—TRIO: "Lightly row us, gondolier." *Campana.*
(Female voices.) (Instrumentation by S. Henry Hadley.)
UNISON SOLO: The Postilion. (Male voices.) *Abt.*
7. ESSAY. *The Labor Question.* EDWARD H. CHAMBERLAIN.
8. FROM "MACBETH." Original version in Greek.
CALLIE E. CONANT. SAMUEL A. BURNS.
GEORGE C. COIT. MARTIN E. GILL.
CHARLES F. MCKENZIE. EDWARD B. MERRIMAN.
RALPH K. SWETT.
9. ORIGINAL CONTRIBUTIONS. MABEL L. HOWES.

RECESS.

* Singing accompanied by Hadley's Orchestra.

MUSIC.

- SINGING.— Gipsy Life. (With orchestra.) *Schumann.*
GLEE: "My love 's like a red, red rose." *Garrett.*
(Unaccompanied.)
10. READING. Rest and Recreation. G. PEARLE TAYLOR.
11. ESSAY. *American Women.* GRACE A. WINN.
12. LA RUSE DE LA TANTE. (Original.)
NELLIE M. AUSTIN. M. BELLE BROOKS.
L. MABEL DAVIS. ABBIE H. GILKEY.
MINNIE A. KNIGHT. LIZZIE S. PEIRCE.
LOUISE E. PRATT. EDWARD A. BAILEY.
WILLARD C. HILL. ARTHUR N. RICHARDSON.
13. READING. The Night Ride. *Cable.*
FLORENCE V. HOPKINS.
- SINGING.— Evening Song. *Abt.*
(Young ladies of the graduating class.)
VOCAL MARCH: The Holiday. (With orchestra.) *Veazie.*
14. POEM. DAISY C. HOYT.
15. PROPHECIES. FREDERIC E. WOOD.
16. VALEDICTORY. JENNIE C. EATON.
17. PRESENTATION OF DIPLOMAS. BY MAYOR MARK F. BURNS.
18. PARTING HYMN.

MEMBERS OF THE GRADUATING CLASS.

Nellie Louise Angier.
Ellen May Austin.
Katharine Louise Bingham.
May Belle Brooks.
Emma Frances Cox.
Emma Florence Crosby.
Mabel Frances Dobinson.
Jennie Cram Eaton.
Hattie Elizabeth Gould.
Flora Belle Grover.
Florence Vaughan Hopkins.
Mabel Lavonia Howes.
Daisy Carroll Hoyt.
Minnie Amelia Knight.
Ruth Dingly Loring.
Eliza Elmira Paige.
Elizabeth Strickland Pierce.
Louise Everett Pratt.

Nettie Belle Prince.
Catherine Dodge Richards.
May Alice Russell.
Nellie Isabel Saben.
Anna Frances Smith.
Florence Naomi Smythe.
Emma Frances Stevens.
Georgianna Pearle Taylor.
Mae Sanders Tower.
Alice Susan Willey.
Ellen Sears Willis.
Grace Augusta Winn.
Emma Gertrude Woodberry.

Willard Cleaves Aldrich.
Edward Albon Bailey.
Thomas John Cadwallader.
Edward Wallace Chamberlain.

Fred Everett Davis.
 Charles Everett Fitz.
 Willard Converse Hill.
 Edward Andrew McGrath.
 Fred Hammond Merrifield.

Herbert Ernest Miller.
 Mark Newell North.
 Arthur Newell Richardson.
 Elton Samuel Sibley.

COURSE PREPARATORY TO COLLEGE.

Arthur Colton Baldwin.
 Samuel Albert Burns.
 George Chandler Coit.
 George Henry Dickerman, Jr.
 Martin Edward Gill.
 Charles Fisk McKenzie.

Edward Butler Merriman.
 Ralph Keyes Swett.
 Frederic Edward Wood.
 Clara Elizabeth Conant.
 Lizzie Mabel Davis.
 Abbie Helen Gilkey.

EVENING SCHOOLS.

The evening schools which were in operation at the close of last year were continued until the end of February of this year.

DRAWING SCHOOL.

Number of sessions to March 1	16
Average whole number of pupils	92
Average attendance	76
Number of teachers	3
Cost of instruction	\$176 00
Janitor's services	16 00
Gas	24 00
Cost of materials	43 51
Total cost to March 1	<u>\$259 00</u>

EVENING GRAMMAR SCHOOLS.

Number of schools	3
Number of sessions	31
Average whole number of pupils	133
Average attendance	99
Number of teachers in January	15
" " " February	9
Cost of instruction	\$567 00
Janitor's services	93 00
Gas	65 00
Total cost to March 1	<u>\$725 00</u>

Evening schools for instruction in grammar-school studies were opened in the Prescott and L. V. Bell schoolhouses on Monday, Nov. 8, and a school for instruction in drawing in the high school building, on Tuesday, Nov. 9.

PRESCOTT EVENING SCHOOL.

Number of sessions	26
Whole number registered	111
Largest number present at one time	70
Smallest " " " " "	20
Average attendance	31
Cost of instruction	\$146 50
" " books	16 00
" " gas	20 00
Janitor's services	26 00
Total cost	<u>\$208 50</u>

Principal. — John S. Hayes.

Assistants. — Lorenzo B. Grigson, Lilla J. Pike.

L. V. BELL EVENING SCHOOL.

Number of sessions	26
Whole number registered	199
Largest number present at one time	100
Smallest " " " " "	18
Average attendance	42
Cost of instruction	\$179 00
" " gas	20 00
Janitor's services	26 00
Total cost	<u>\$225 00</u>

Principal. — Herbert L. Morse.

Assistants. — Frederick A. P. Fiske, Mary C. Worden, Ernest A. Johnson, Mary S. Rinn.

DRAWING SCHOOL.

Number of sessions	13
Whole number of pupils	69
Largest number present at one time	68
Smallest " " "	32
Average attendance	57.6

Cost of instruction	\$98 00
" materials	28 25
" gas	10 00
Janitor's services	13 00
	<hr/>
Total cost	\$149 25

Principal. — Frank H. Collins.

Assistant. — Miss Bragdon.

Entire cost of evening schools for the year	<u>\$1,567 25</u>
---	-------------------

TEXT-BOOKS.

At the beginning of the school year, Shaw's History of English and American Literature was introduced into the high school. A copy of Lectures on School Hygiene, published by Ginn & Co., was placed upon the desk of each teacher in the grammar schools. Miss Stickney's Classics for children were introduced into the primary schools. Greenleaf's Brief Course in Arithmetic was substituted for Greenleaf's Complete Arithmetic in the fourth class.

All text-books now in use in the schools belong to the city.

Cost of books purchased in 1884	\$7,320 00
" " " " 1885	3,879 00
" " " " 1886	2,322 00
	<hr/>
Total cost	<u>\$13,021 00</u>

For the high school	\$2,916 00
" grammar and primary schools	9,943 00
" evening schools	162 00

The estimated annual cost of text-books, based upon the expectation that a set of books will last three years, is \$4,340.

Annual cost per scholar in the high school	\$2 80
" " " grammar and primary schools	72

The cost annually for writing books and drawing books is about \$850, or 30 cents for each pupil.

GENERAL REGULATIONS AND COURSE OF STUDY.

The rules of the school committee, the regulations of the public schools, and the course of studies for the several grades of the

LIBRARY BOOKS.

At the regular meeting of the Board, in January last, Messrs. White, Butler, Shepard, Hill, Carr, Brown, and Mayor Burns were appointed a committee to select and present to the Board, for consideration and approval, a list of books, which, in their judgment, are suitable for perusal by pupils of the public schools.

In accordance with instructions, the committee, with great care and much labor, have made selections and prepared a catalogue which they will soon present to the Board. This catalogue, when completed, will be printed for the use of the schools.

SCHOOL MANAGEMENT.

The general duties of school committees are definitely specified in the Public Statutes, and great discretionary power is authorized in all matters concerning which no specific directions are given.

It is the province of the committee to select and appoint teachers, to limit school time, to grade the schools, to arrange courses of study, to define the qualifications requisite for promotions, and to prescribe methods of examinations.

SELECTION AND APPOINTMENT OF TEACHERS. — The character of the schools depends so largely upon their teachers, the duty of selecting them stands first in importance. It has been truthfully said: "The vital connection between the teacher and his work renders the one, in a certain respect, the measure of the other. Given the qualifications of the master, his conscientiousness, zeal, knowledge, and experience, we can, with tolerable accuracy, predict what his school will be; and, on the other hand, given the school, we can resolve its character into that of the master." Plato says: "The teacher should be a model man, for he will mould his disciples into beings like to himself." The distinguished Whitelaw Reid says: "There is no place in the public service where inefficient work is more to be deplored than in the education of children. If laws are badly made, you can repeal them; if courts do not rule justly, you can remove the judges; but if the schools are ill-managed, if the children are led astray, or even not led aright, you are poisoning the life-blood of the community."

During the last five years ninety teachers have been elected to fill vacancies caused by resignations and for new schools, — an

average of eighteen each year, or sixteen per cent of all teachers employed by the city.

Since the demand for teachers who possess all the qualifications requisite to insure success far exceeds the supply, the labor of procuring a sufficient number of such to meet our necessities is by no means insignificant.

SCHOOL TIME. — The time assigned to the schools, by the regulations, is five hours a day, five days a week, and forty weeks a year, including holidays and stormy days, on which the schools are not in session, amounting usually to two weeks. Since the average attendance of pupils in the high school and the several grammar schools is about ninety-six per cent, a further reduction of four per cent of school time should be made on this account. The remaining 36.48 weeks — the actual school time — and the estimated average ability of pupils at different stages of advancement, form a basis for the arrangement of courses of study, and in estimating the annual school requirements.

GRADES OF SCHOOLS. — Our schools comprise three grades and thirteen classes. The primary schools contain three classes, the grammar schools six, and the high school four. In arranging courses of study for the several grades, great care is required, in order that the work demanded of each class shall be adapted to the average ability of pupils composing the class, and that the various studies pursued may be so apportioned that the demands upon pupils who are regular in attendance and faithful in the performance of school duties shall not exceed their ability at any stage of advancement.

SCHOOL STUDIES. — In arranging their programme of studies, committees are required to select, from the vast resources of learning, those subjects a knowledge of which will be most helpful in the performance of the ordinary duties of life, and most essential as a preparation for the pursuit of higher courses of study. They must also limit the extent to which the subjects of their choice shall be pursued. Since the development of intellectual power and the formation of good mental habits are more important than the gaining of knowledge, branches of study must be selected not only with a view to their utility in furnishing the mind with useful information, but also to their value in demanding for their acquisition that vigorous exercise of the mental faculties by which intellectual power is secured.

STANDARD OF SCHOLARSHIP FOR PROMOTIONS. — In establishing this standard, care must be exercised lest it be placed so low that pupils will be promoted prematurely, and to their injury, or so high that those who are capable of comprehending and performing the work demanded in a higher class, will fail of promotion.

Public schools must, of necessity, be graded schools. Committees usually make the number of classes in each grade correspond to the number of years required to complete the work prescribed for the grade. Even with this classification, each of the thirteen classes will be composed of pupils who differ widely in natural ability, ambition, perseverance, physical endurance, habits of punctuality, industry, and application, and consequently in scholarship. Not unfrequently the estimated difference in scholarship of pupils at the extremes of a class is twenty per cent at the beginning of the year, and increases as the year advances, and often amounts to thirty per cent at its close. With our system of examinations, the average scholarship in the several classes of the grammar schools does not vary materially from eighty per cent.

In all arrangements for the management of the schools, the dominant motive is the highest good of every scholar. In making promotions, it is our intention and earnest desire that each pupil shall occupy that position in school which will secure to him the highest possible advantage. Promotions are not denied, when, in the judgment of those who make them, they are warranted by scholarship and ability; neither are they granted prematurely and to the permanent injury of pupils.

The observations of years indicate that, as a rule, pupils who are promoted by a standard of scholarship lower than that prescribed by the regulations of the School Board, are incapable of performing successfully and to their profit the work demanded of them. Since, however, the prescribed standard of seventy per cent in the grammar schools, and sixty-five per cent in the high school, is an arbitrary standard established on variable data, it is regarded unwise to adhere to it rigidly under all circumstances. Hence the regulations provide that —

“Pupils in the high school and the several grammar schools, whose rank in scholarship falls below the required standard, shall be considered separately, and each case decided upon its merits by the subcommittee, the principal, and the superintendent. The age, the general character and capacity of such pupils, their daily work through the year, and habits

of industry and application, as shown by the teacher's records, shall be duly considered in deciding upon their promotion, graduation, or retention."

As a result of our practice, about ninety per cent of all pupils in the high school and the several grammar schools are promoted each year.

EXAMINATIONS. — Examinations or test exercises, oral and written, hold an important and prominent place in all well-conducted schools, and claim more than a passing notice.

If examinations are used as an end, and teaching and study are made subordinate to them, if they are taken immediately after they have been specially prepared for by a process of cramming, or if they are so used as to induce nervousness and undue anxiety in the minds of pupils, they are diverted from their legitimate purpose, and become harmful instead of helpful. All such use should be discountenanced and discarded. When, however, they are wisely employed, they are among the most healthy and efficient agencies in promoting and securing thorough and valuable school work.

The simplest form of examination is the oral recitation that usually follows closely upon the preparation of a lesson. This form of examination is a test of pupils' fidelity in the preparation of the lesson assigned, and of their success in obtaining from the printed page the knowledge it is designed to communicate; it suggests, also, to the teacher such illustrations and subsidiary information as may be needed to deepen and render more vivid and permanent the impressions which the pupils have received through their unaided efforts.

The expectation of the recitation, in which the knowledge acquired must be communicated to teacher and associates, is a healthy incentive to close application, and a careful preparation of the lesson assigned. The constant practice of reciting what has been learned promotes the power of expression, increases the command of language, and gives permanency to what has been acquired.

It is highly essential to a pupil's success in pursuing a course of study, that the work required of him, at all times, should be within the scope of his comprehension, and such as his knowledge and previous training have prepared him to perform. Written examinations are valuable and indispensable aids in determining scholarship, and in forming a just and accurate judgment concern-

ing a pupil's attainments and his ability to pursue with profit studies of a higher grade. The following are the regulations pertaining to examinations:—

“In each of the several classes in the high school written test examinations shall be held bi-monthly, under the direction of the principal. Pupils whose rank in scholarship, as indicated by the average of the examinations, is sixty-five per cent, will be entitled to promotion at the end of the school year.

“In each of the several classes of the grammar schools, written test examinations shall be held bi-monthly. Pupils whose rank in scholarship for the year, as indicated by the average of the several examinations, is seventy per cent, will be entitled to promotion.

“The principals shall examine bi-monthly the schools in their respective buildings, in reading, writing, and drawing.

“The question for one of the bi-monthly examinations of grammar schools shall be prepared by the principals; for the final examinations by the superintendent; and for the remaining examinations by the teachers, under the direction of the principals.

“The questions for the final examinations of the first class shall be submitted to the high school committee and the principal of the high school for their approval.

“In addition to these examinations, each teacher shall keep a careful record of results of examinations and of those qualities, in each pupil, which make the diligent, faithful scholar, and which no examination can correctly disclose. These records will be used at the close of the year in deciding upon all doubtful cases of promotion.”

Well-conducted written examinations, at suitable intervals, furnish to teachers and pupils reliable information upon various matters which it highly concerns them to know, and which could be obtained by no other means. They reveal to pupils their deficiencies and acquaint them with the accuracy and *permanency* of their knowledge and their ability to express, in writing, what they have labored to acquire. They furnish teachers with the desired information concerning the knowledge or ignorance of their pupils of the subjects pursued, and reveal to them also the efficiency and defects of their own instruction.

The questions proposed by teachers in their examinations exhibit the range of their teaching, and furnish opportunity to principals to make such criticism and suggestions as may be deemed necessary, in order to secure desirable uniformity of instruction in the schools under their special supervision. The examinations by the principals and the superintendent are less

specific in character than those by the teachers, and are intended as a general review of the leading subjects considered during the year. They are a more severe test of the permanency of the pupils' acquisitions than those which follow more immediately upon the study of the subjects under review, and are especially valuable on account of their influence upon the memory.

It is wise to inquire how examinations which enter so largely into the exercises of the schools may best aid in improving the memory and in giving greater permanence to the knowledge acquired.

The memory holds high rank among the faculties of the mind, and its proper cultivation claims our constant care. "The retentive faculty," says Bain, "is the faculty that most of all concerns us in education." By judicious exercise it becomes a treasury ever increasing in richness as the years move on. Cultivate it aright, and whatever is committed to it will become a permanent possession ever ready for use. Carelessly neglect it, and impressions made upon it will be as evanescent as inscriptions upon shifting sands; and mental poverty will inevitably ensue.

It is cause of regret, and not a little surprise, that so large a proportion of the knowledge acquired by our pupils is so soon forgotten, and that impressions made upon them by instruction communicated are not more permanent.

This lamentable and irreparable loss of time and manifest inability to retain permanently what has been acquired should excite earnest inquiry into the cause, and lead to the diligent and vigorous application of the remedy.

It is a very generally admitted statement, that "whatever is soon forgotten was never thoroughly learned." Carlyle says, "Be careful not to stamp a thing as known only when it is so stamped on your mind that you may survey it on all sides with intelligence." Impressions that endure are deeply engraved. Nothing truly valuable is gained without earnest, persistent effort. Knowledge that has durability was acquired by close application, patient, continuous thinking. The permanency of knowledge is commensurate with the labor bestowed upon its attainment. What is communicated to us and of which we are merely passive recipients, is soon forgotten.

The frequent recollection and repetition of what has been learned, assists greatly the permanent remembrance of it. Hence

the importance of a system of examinations, oral and written, which compels frequent reviews of what we would have indelibly stamped upon the mind.

In order, however, that the desired results from examinations may be obtained, they must never be regarded as an end. What is learned for the sake of an examination merely, will soon be forgotten when that event is passed. Unexpected examinations, and occasional examinations of topics at periods remote from the time of their consideration, are valuable as correctives of hasty and superficial preparation.

SCHOOL DISCIPLINE.

We respectfully invite attention to the following extracts from a paper by Dr. W. T. Harris : —

“The pillars on which school education rests are behavior and scholarship. Deportment or behavior comes first, as the *sine qua non*. The first requisite of the school is order; each pupil must be taught to conform his behavior to the general standard, and repress all that interferes with the function of the school. . . . Lax discipline in a school saps the moral character of the pupil. It allows him to work merely as he pleases, and he never can re-enforce his feeble will by regularity, punctuality, and systematic industry. . . . Too strict discipline, on the other hand, undermines moral character by emphasizing too much the mechanical duties, and especially the phase of obedience to authority, and leaves the pupil in a state of perennial minority. He does not assimilate the law of duty and make it his own. The law is not written on his heart, but is written on lips only. The tyrant teacher produces hypocrisy and deceit in his pupils. All manner of fraud germinates in attempts to cover up shortcomings from the eye of the teacher. . . . There is no independence and strength of character developed. The best help one can give his fellows is that which enables them to help themselves. The best school is that which makes the pupils able to teach themselves. The best instruction in morality makes the pupil a law unto himself. Hence strictness, which is indispensable, must be tempered by such devices as cause the pupil to love to obey the law for the law's sake.”

It is our pleasure to report that, pro rata, the number of cases of corporal punishment reported this year is smaller than on any previous year. Thirteen teachers report no case of punishment during the year; eleven, one case each; and eleven, two cases each.

MORAL TRAINING.

We cannot emphasize too strongly the importance of the moral element in education. "The whole school life should be moral in tone and tendency." An eminent statesman has said, "Whatever you desire to have in your nation, you must introduce through your schools." Only a few years, and the children and youth comprising the public schools and higher institutions of learning in our land, will have in charge all the vast interests of society. Their fitness for the responsibilities awaiting them will depend in large measure upon the quality of the instruction they are now receiving, and the influences by which their characters are being moulded.

It is a cheering indication of the advance of popular sentiment in the right direction, that schools and teachers are being estimated and prized more and more by their moral character and influence. We seek for well-educated teachers, teachers who understand the best methods of instruction, and are skilful in applying them, but the thought that overshadows all other considerations regarding them, pertains to their moral character and influence.

It has been wisely said: "Mere teaching, without formative influences on character, is simply a trade. Character is a man's deepest love, and will determine his ultimate destiny. Hence the highest form of benevolence is in seeking to improve it. He who appreciates the value of character clearly, and devotes himself with energy and self-denial to its improvement in himself and others, is the highest style of a man; and the institution that does most for character will do most for the individual and the country."

J. H. DAVIS,

Superintendent of Public Schools.

SOMERVILLE, Dec. 27, 1886.

REPORT

OF THE

SOMERVILLE MYSTIC WATER BOARD.

CITY OF SOMERVILLE.

IN BOARD OF MAYOR AND ALDERMEN, Feb. 23, 1887.

Referred to the committee on printing, to be printed in the annual reports. Sent down for concurrence.

CHARLES E. GILMAN, *Clerk.*

IN COMMON COUNCIL, Feb. 24, 1887.

Concurred in.

DOUGLAS FRAZAR, *Clerk.*

CITY OF SOMERVILLE.

To his Honor the Mayor and the City Council:

GENTLEMEN, — It is with more than ordinary satisfaction that your Board reviews the work of the past year, and contemplates the relation of this department to the city government in the future.

No previous year has closed of late without regret on the part of the Board that no change had been effected in our contract relations with the Boston Water Board. Hence our pleasure in referring to the fact, announced in the early summer, that a new contract has been made, whereby \$18,000 a year is saved to the city at present, which amount will increase in our favor with the city's growth. In contemplating this new contract, we not only share the gratification of the general public, but, having labored long in the face of many obstacles, the success gained means more to us than it can mean to others. It is but justice to say that this contract, in which Chelsea and Everett share, was secured largely through the instrumentality of our Board; and to Walter S. Barnes, our representative on the special committee, are we indebted more than to any other one, because through his devotion, untiring energy, and good judgment the desired result was attained.

We have been especially fortunate, also, in the matter of damage to persons and property, and have no unsettled claims at this time. We wish to express our appreciation of the prompt service of the police and private citizens in notifying us of bursts in the mains, thereby in some cases preventing great damage.

We have been enabled, out of the appropriation of the past year, to relay some of the weakest mains, and our chief regret, as we review the work of the department, is that the appropriation did not enable us to relay more mains. If double the number of feet could have been relaid during the past year, indeed during the past four years, the maintenance account would have been greatly lessened, and the condition of the service much improved. Con-

sidering the time, however, during which these mains have been in use, we have reason to congratulate ourselves that they have endured so long; and they are now in better condition than the most favorable estimate would have allowed us to expect, when we remember that they were laid by contract, more than twenty years ago, and warranted for only five years. It is not strange, therefore, that in some instances the streets, notably Beacon and Poplar Streets, are positively dangerous. The most important work to be done during 1887 is the relaying of the main in Beacon Street, where the breaks in the street are frequent and expensive, in consequence of the pipe being under the horse-car track. Although the relaying will be attended with some difficulty and more than usual expense, there should be no delay in doing the work. Both economy and safety demand that these mains be relaid as soon as the frost is out of the ground.

There have been 2,273 feet of mains replaced by new pipe the past year, and 6,698 feet of new mains laid, to accommodate new dwellings; 292 services have been put in, mostly in new houses. The whole number of services is now 4,626. There are now in the city $50\frac{1}{4}$ miles of mains and $29\frac{1}{2}$ miles of service pipe. During the past year nearly all of the old wooden service gate-boxes, that used to stand up from the sidewalk at a convenient height to trip the passers-by, causing much annoyance and some serious accidents, have been replaced by iron boxes of an approved pattern.

We have few recommendations for 1887, other than those already referred to. The ten-inch main which now leads from the reservoir to the corner of Grove Street and Highland Avenue, near the Brastow hose house, should be extended on Highland Avenue to Central Street. This will complete the original plan of the works, and add materially to the pressure on Highland Avenue where it is needed, and also will improve the circulation and consequently the quality of the water. This will certainly have to be done soon, and until then all the devices of running small pipes to houses along the line cause a waste of money, and are unsatisfactory to all concerned. This work would cost probably \$5,000, and would not directly increase the revenue; but we owe it to all the water-takers in that part of the city to make the improvement.

Another matter that has had the attention of the Board concerns

those citizens near the Cambridge line who are supplied by the Cambridge department. The Cambridge pipes are old, in bad condition, and when they are relaid it should be done by the Somerville department. The service is unsatisfactory, and water-takers are petitioning us for relief. There are probably 7,000 feet of this pipe. It is in a thickly settled portion of the city, and we should reap a good revenue at once. The most annoying circumstance connected with the work of the department is the fact that the large works of J. P. Squire & Co. take water from Cambridge, most of which is used in buildings located in Somerville, Cambridge making a special rate to them of about one half that paid by other consumers. The Boston Board is not at liberty to compete in this way, and the policy of the State in relation to the water supply would not for a moment approve of Cambridge's making a special bid which takes from us several thousand dollars each year. The introduction of water is principally for the benefit of the homes, and they should have it at the lowest possible cost. The law of wholesale prices for large quantities does not hold good in public works of this kind.

With this new contract already in working order there remains but one desirable thing of any magnitude to be obtained, namely, a never-failing supply of pure water. The Board has taken an active interest in preliminary steps to obtain the pure water of the Shawsheen River, to be used as a substitute for the Mystic, or as an additional supply.

As this matter is before the Legislature, we trust that our senator and representatives will consider the interest which Somerville has in this measure, and that all citizens acquaint themselves with the facts upon which this legislation is asked.

For a detailed statement of the work and condition of the department, we refer you to the appended report of the Superintendent, Mr. Nathaniel Dennett, to whose industry we are largely indebted for the efficiency of the service.

J. O. HAYDEN.
 WALTER S. BARNES.
 CHAS. H. BROWN.
 JOHN M. WOODS.

SUPERINTENDENT'S REPORT.

To the Somerville Mystic Water Board :

GENTLEMEN, — The annual report of the Superintendent of the Somerville Mystic Works is respectfully submitted, giving a detailed account of all work performed during the year 1886. The schedules hereto annexed show the sizes and locations of the extensions of main pipe, and of the pipe relaid ; and also the stop-gates, hydrants, and stand-pipes set. The inventory of tools and stock on hand is included.

DISTRIBUTION MAINS.

These were extended 6,693 feet or $1\frac{1}{4}$ miles, 98 feet, of which 132 feet was hydrant pipe ; making the total length in the city $50\frac{1}{4}$ miles, 98 feet ; 2,273 feet of cast-iron pipe have been relaid in place of cement-lined pipe ; 798 feet of this pipe was relaid for the Trustees of the McLean Asylum, and the expense was borne by them. For the better protection of the Middlesex Bleachery and Dye Works, 215 feet of cast-iron pipe was laid in their premises, and a 6-inch hydrant connected with the same, the whole at the expense of the proprietors ; 141 feet of cement-lined pipe was relaid in place of old, for repairs on the same.

There have been 50 breaks and leaks, 23 on 4-inch cement-lined pipe, 18 on 6-inch, and 9 on 8-inch.

The streets referred to in my last report continue to give about the same trouble. Poplar Street especially has given out, and only a portion of the pipe is now in use.

STOP-GATES.

Twenty-one new stop-gates have been set, 8 on old mains and on 13 extensions, viz. : —

On old mains, —

- 1 six-inch gate, corner of Broadway and School Street.
- 1 four-inch gate, corner Evergreen Avenue and School Street.
- 1 eight-inch gate, Broadway, near drinking fountain.

- 1 four-inch gate, Wesley Park, corner Summer Street.
- 1 " " Winter Street, corner Holland.
- 1 six-inch gate, Franklin Street, corner of Flint.
- 1 " " corner Preston and School Streets.
- 1 " " " Summer and School Streets.

On extensions, —

- 1 four-inch gate, Summer Street, corner of School.
- 1 six-inch gate, Runey Street, corner Eglantine.
- 1 " " Dartmouth Street, Evergreen Avenue.
- 1 four-inch gate, Buckingham Street, corner Beacon.
- 1 " " Magoun Street, corner Medford.
- 1 six-inch gate, Beacon Street, corner Kent.
- 1 " " Warwick Street, corner Cedar.
- 1 four-inch gate, Essex Street, corner Medford.
- 1 eight-inch gate, Walnut Street, near Bonair.
- 1 four-inch gate, Sanborn Street, corner Walnut.
- 1 " " Parker Street, corner Washington.
- 1 six-inch gate, Austin Street, corner Benedict.
- 1 " " Somerville Avenue, near Bleachery Court.

On account of relaying the pipe, the following changes in size of the stop-gates have been made : —

Gate corner Walnut Street and Broadway from six inches to eight inches.

Gate corner Bonair and Walnut Streets, from four inches to six inches.

Gate corner Mills and Walnut Streets, from four inches to six inches.

Gate corner Maple and Poplar Streets, from four inches to six inches.

Gate corner Medford and Poplar Streets, from four inches to six inches.

Twenty-three gate-boxes have been raised to conform to the present grade; 4 have been taken out, repaired and reset; 26 wooden gate-boxes have been set in place of old decayed ones; 81 gates found leaking have been repacked, and all have had the usual care, and are in good order. The total number of gates in the city is 482.

HYDRANTS.

There are 343 fire hydrants ; during the year 21 hydrants were set,—14 on old mains and 7 on extensions,—located as follows :—

On old mains, —

- Dartmouth Street, near Broadway.
- Dover Street, opposite car stables.
- Austin Street, near Mystic Avenue.
- Austin Street, opposite Benedict.
- Chestnut Street, 400 feet from Joy.
- Everett Street, opposite Emerson.
- Washington Street, corner Tufts.
- Broadway, between Cutter and Franklin Streets.
- Walnut Street, opposite Pleasant Avenue.
- Chester Street, near Orchard.
- Park Avenue, near Chandler Street.
- Washington Street, corner Myrtle.
- Washington Street, corner Franklin.
- Vine Street, near Beacon.

On extensions, —

- Summer Street, near School.
- Summer Street, opposite Preston.
- Medford Street, near Thurston.
- Dartmouth Street, corner Evergreen Avenue.
- Richdale Avenue, corner Thurston Street.
- Medford Street, opposite School.
- Dartmouth Street, near Medford.

Eight of the old disk hydrants, which have given considerable trouble in years past, have been taken out and altered to the Holyoke pattern. All the hydrants have had the usual attention paid them, having been carefully looked over once a month ; 140 have been repacked, and other needed repairs have been made. They are now in good working order, none having failed at fires.

The hydrant on Washington Street, near the Lowell Railroad bridge, having been struck several times by teams and its position being dangerous to the same, it has been removed ; also, the one near the corner of Washington and Franklin Streets has been removed, and one set in its place some twenty feet up Franklin Street.

One new post hydrant has been set in place of a flush hydrant in the Asylum grounds.

SERVICE PIPES.

The whole number laid in 1886 was 292, at an average cost of \$18.84; the length of pipe used was 11,696½ feet. The whole number of services is now 4,626; total length of pipe, 29½ miles, 494½ feet.

Thirty-six old services have been replaced by new ones; 23 at the expense of the owners, as the old service pipes had become too small for their increased requirements; the remainder at the expense of the service department, as the old pipes furnished by the city were rusty and unfit for use.

Twenty-five leaks have occurred, and were caused as follows: 14 by defective soldering, 5 by pick-holes, and 6 by settling of the earth.

One hundred and thirty-nine services were stopped; 38 by eels, 68 by rust, and 33 by sediment or other causes.

Thirty-nine were shut off for repairs on account of leaks inside the premises, and 35 for non-payment of the water rates.

One hundred and eighty-four iron service boxes have been substituted for decayed wooden ones. Quite a number of wooden boxes should be removed as soon as convenient.

STAND-PIPES.

Five new stand-pipes have been set:

One on Concord Avenue, near Adrian Street.

One on Mystic Avenue, corner Union Street.

One on Highland Avenue, corner Central Street.

One on Pearl Street, near Marshall.

One on Summer Street, corner Cedar

All the stand-pipes received the usual attention, were repaired when necessary, and are in good order.

DRINKING FOUNTAINS.

All have received the customary care, requiring but few repairs. A large iron fountain at the easterly end of Union Square, which was set to take the place of a similar one, has proved unsuitable for the place. It has been broken by heavy teams a number of times and is now beyond repair. I recommend that your honora-

ble Board confer with the committee on highways, in regard to replacing it with a granite fountain like the one in Davis Square, as that is the only one in the city adapted to the requirements of Union Square.

BUILDINGS.

The buildings used by the department — the exterior repairs on the old police building having been completed — now conform to the appearance of the other public buildings.

MISCELLANEOUS WORK.

Fifty-three trenches were repaired and 59 places were paved. In the department shops, 12,300 feet of service pipe have been lined with cement; gate-boxes were constructed and gates repaired; hydrants altered and repaired; and a large amount of incidental work performed.

STOCK AVAILABLE FOR FUTURE USE, JAN. 1, 1887.

Cast-iron pipe	\$2,740 00
Cement-lined pipe	295 30
Sheet-iron shells	24 64
Service pipe, lined and unlined	799 40
Service materials	600 80
Materials for water works	592 65

MACHINERY, TOOLS, AND FURNITURE.

Stable department	\$1,190 50
Tools and machinery for water works	810 92
Tools and machinery for service department	523 00
Office furniture	280 00

EXTENSION OF PIPE IN 1886, IN FEET. GATES AND HYDRANTS SET.

LOCATION.	EXTENSIONS.				STOP-GATES.			Hydrants.
	1½ in.	2 in.	4 in.	6 in.	4 in.	6 in.	8 in.	
Arnold Court	137½							
Austin St., near Mystic Ave						1		1
Austin St., corner Benedict								1
Austin St., opposite Benedict						1		
Beacon Street				498		1		
Benedict Street				128				
Bond Street				48				
Broadway, corner School Street						1		
“ near drinking fountain,							1	
“ b'n Cutter & Frank'n sts.								1
Buckingham Street			197		1			
Chandler Street	426			190				
Chapel Street			40					
Chauncy Avenue				294				
Chester Street, near Orchard								1
Chestnut Street, 400 ft. from Joy								1
Dartmouth Street				577				
“ corner Evergreen Av.,						1		1
“ near Broadway								1
“ near Medford								1
Dover Street, opposite car stables,								1
Essex Street			19	248	1			
Everett Street, opposite Emerson,					1			1
Evergreen Avenue				13				
Franklin Street						1		
High Street				84				
Linden Court	141							
Magoun Street			159		1			
Medford Street				213				
“ near Thurston								1
“ opposite School								1
Oxford Street			24					
Park Avenue, near Chandler								1
Parker Street			214		1			
Preston Street				378		1		
Richdale Avenue				219				1
Runey Street				284		1		
Sanborn Street			310½		1			
School Street				169				
Somerville Av., near Bleachery Ct.,						1		
Summer Street, near School								1
Summer Street				695	1	1		
“ opposite Preston								1
Vine Street, near Beacon								1
Walnut Street, near Bonair							1	
“ opposite Pleasant Avenue,								1
Warwick Street				583		1		
Washington Street, corner Tufts								1
“ corner Myrtle								1
“ corner Franklin								1
Wesley Park			62		1			
Winter Street, corner Holland					1			
Hydrant pipe			132					
Middlesex B. & D. Works				215				

CAST-IRON PIPE RELAID IN 1886, IN FEET.

LOCATION.	6 in.	8 in.
Adams Street	36	
Bonair Street	15	
Franklin Street		36
Maple Street	715	
Mills Street	25	
Tufts Street		36
Walnut Street		612
McLean Asylum	798	

CEMENT-LINED PIPE RELAID ON ACCOUNT OF BURSTS.

LOCATION.	4 in.	6 in.	8 in.
Beacon Street		16	
Broadway			8
Chester Street	17		
Ellsworth Street	7		
Everett Street	7		
Evergreen Avenue	7		
Homer Square	7		
Morrison Street		6	
Mystic Avenue		18	
Professors' Row		6	
Somerville Avenue		21	
Springfield Street	14		
Washington Street		7	

Respectfully submitted,

NATHANIEL DENNETT,

Superintendent.

WATER CONTRACT.

WATER CONTRACT.

This agreement, made this first day of July, 1886, between the city of Boston, in the county of Suffolk, by the Boston Water Board, first party, thereto authorized by an order approved by its mayor, March 24, 1886, and the city of Somerville, in the county of Middlesex, by its Water Board, second party, thereto authorized by an order approved by its mayor, May 18, 1886, witnesseth:—

1. That the said parties cancel any and all agreements heretofore made between the city of Boston or the city of Charlestown and the second party relating to rates or rents for the use of water supplied by the city of Charlestown or the city of Boston, within the territory of the second party.

2. That the said first party shall furnish to the second party and its inhabitants water from the Mystic water supply, or any increase of or substitute for the same hereafter authorized by the Legislature, and that the supply of the same shall not be discontinued or restricted, unless the quantity of water from the said supply, or any substitute therefor, fails to exceed the requirements of the inhabitants of the Charlestown district of said city within its present territorial limits, and of the inhabitants of the city of Chelsea.

3. That the said second party shall, at its own cost and expense, lay and maintain all the pipes, hydrants, and stop-gates necessary for conveying the water from the pipes laid by the first party, and distributing the water within the limits of the territory of the second party.

4. That for all the water furnished by the said first party to, and used by the second party, or by any person within the territory of the second party, the said first party shall, at its own expense, collect water rents at the same rates and prices, and under the same rules and regulations as are now, or may hereafter be, established by the said first party, for the use of water in the city of Boston; provided that the price to be collected for fire hydrants shall be twenty-eight dollars per year for each three

hundred and fifty inhabitants, as shown by the semi-decennial census next preceding; in computing the amount, the fraction shall not be taken into account, unless it exceeds one half, when the full price shall be charged; said hydrants to be as many as said second party may determine, but not to be used for any purpose whatever except for fire purposes; that the water for public fountains shall be supplied at cost, and that the second party shall not be held responsible in any case for the payment of said water rates except for water used for hydrants, public fountains, and other city purposes.

5. That the said first party shall pay to the said second party, in the months of January, April, July, and October of each year, a rebate of fifty per cent of the rates collected for the use of water within the territory of the second party.

6. That the said second party may raise the water rates within its territory above those charged by the said city of Boston; and, in case the water rates shall be so raised, the first party may retain to its own use five per cent of the excess of said rates over the rates established by said city of Boston, and pay over the balance of said excess to the second party, as hereinbefore provided.

7. That the said first party may, at its own expense, take such measures and use such machines and apparatus for the prevention of waste within the territory of the second party as shall be taken and used in the city of Boston.

8. That the said second party shall pass and enact the like rules and regulations as to the use of water within its territory as are now or may hereafter be in force in the city of Boston, with like penalties for their violation; provided such rules and regulations shall not conflict with the laws of the Commonwealth.

9. That the said second party shall furnish a map of its territory to the first party, and from time to time make prompt additions thereto, so as to show all streets in which pipes are laid and the location of all pipes, hydrants, and stop-gates.

10. That if any agreement, deemed by the second party more favorable, shall, during the continuance of this agreement, be made with any other city or town, the said second party shall be entitled to the same terms, but the charge herein fixed for hydrants shall remain until the expiration of the contract.

11. That this agreement shall continue in force as long as the Mystic water supply, or any increase of or substitute for said

supply hereafter authorized by the Legislature, shall be used by the first party, or until this agreement shall be cancelled by said first party, and other terms than those herein agreed upon shall be fixed, as hereinafter provided.

12. That if this agreement shall be cancelled, and the two parties be unable to agree upon terms for a continuance of a supply of water, the terms shall, after a full consideration of all the circumstances of the case, be equitably fixed by a commission of three disinterested persons, to be agreed upon by the parties; or, if they cannot be agreed upon by the parties, then to be appointed by the Supreme Judicial Court, and their award, when accepted by the said court, shall be conclusive for such time as said court shall order.

HORACE T. ROCKWELL,	} <i>Boston</i>	
WILLIAM B. SMART,		} <i>Water</i>
THOMAS F. DOHERTY,			} Board.

JOSEPH O. HAYDEN,	} <i>Somerville</i>			
WALTER S. BARNES,		} <i>Mystic</i>		
CHARLES H. BROWN,			} <i>Water</i>	
JOHN M. WOODS,				} <i>Board.</i>
MILO CRANE,				
	}			

Approved, May 19, 1886.

HUGH O'BRIEN.

REPORT

OF THE

OVERSEERS OF THE POOR.

CITY OF SOMERVILLE.

IN BOARD OF ALDERMEN, Jan. 26, 1887.

Referred to the committee on printing, to be printed in the annual reports. Sent down for concurrence.

GEO. I. VINCENT, *Clerk.*

IN COMMON COUNCIL, Jan. 27, 1887.

Concurred in.

DOUGLAS FRAZAR, *Clerk pro tem.*

BOARD OF OVERSEERS OF THE POOR.

HERBERT E. HILL	Ward One.
CHARLES S. LINCOLN, <i>Chairman</i>	Ward Two.
EDWARD GLINES	Ward Three.
CHARLES G. BRETT	Ward Four.

CHARLES C. FOLSOM, *General Agent.*

GEORGE T. LINCOLN, *Secretary.*

CITY OF SOMERVILLE.

To the Honorable City Council of the City of Somerville :

GENTLEMEN, — The Overseers of the Poor respectfully submit this as their annual report for the year ending Dec. 31, 1886.

For the expenditures and receipts, they refer to the tabulated statements hereto appended, prepared by the Secretary of the Board, by which it will appear that the net saving for the year has been about three thousand dollars from the annual appropriation, and an expenditure of two thousand dollars less than during the year 1885. These figures speak for themselves, and need no comment, but the Board would remark that the affairs of this department have been managed with care, having due regard to its duty to the unfortunate poor, as well as to the constituents through whom they receive their trust.

The Overseers of the Poor will again call the attention of the City Council to the urgent need of an almshouse for the proper administration of the affairs of this department, when considered from a standpoint of economy, or that of a convenient or humane method in the discharge of the duties of the Board. The subject was brought before the city government early last year, and the members of this Board appeared before an appropriate committee, and gave full and detailed statements as embodying their reasons for their recommendations. It would require too much space here to repeat the arguments and reasons that might be urged, and which were substantially given before that committee, but it should be said, however, that the Board will be ready at any time when requested to present its views upon this important question.

In closing this report, the members of the Board will give their testimony to the faithful and efficient aid they have received from the General Agent and Secretary of the Board. They will also add that the last two years' experience convinces them that the new

system for the management of this department, inaugurated under the statute of 1885, was wisely adopted, and has proved salutary in its operation.

CHAS. S. LINCOLN, *Chairman*.
HERBERT E. HILL.
EDWARD GLINES.
CHARLES G. BRETT.

SOMERVILLE, Dec. 31, 1886.

STATEMENT (A) OF THE MONTHLY EXPENDITURES ON THE SEVERAL ACCOUNTS, WITH PAY-ROLLS.

	Rent.	Board.	Groceries.	Paid other Cities and Towns.	Paid Public Institutions.	Fuel.	Boots and Shoes.	Dry Goods.	Burials.	Salaries.	Miscellaneous.	Amount of Pay-rolls.
Jan.	\$151 50	\$164 76	\$302 92	\$1,069 78	\$1,070 59	\$268 70	\$64 15	\$21 75	\$29 00	\$116 66	\$36 20	\$3,296 01
Feb.	151 50	152 00	277 83	—	43 00	123 96	17 00	7 00	—	116 66	76 35	965 30
March,	151 50	180 80	134 50	185 00	—	121 88	2 50	1 75	—	116 66	13 53	908 12
April,	165 50	165 49	281 00	33 71	957 03	—	8 40	—	47 75	116 66	30 21	1,805 75
May,	135 50	178 98	69 50	—	118 08	—	9 35	—	10 00	116 66	24 34	662 41
June,	122 50	179 92	148 50	18 44	350 90	—	—	4 00	5 00	116 66	26 30	972 22
July,	136 50	153 40	93 46	477 20	631 05	22 70	—	—	5 00	116 66	29 72	1,663 89
Aug.	126 50	148 97	172 87	2 00	—	—	—	4 50	15 00	116 66	3 50	590 00
Sept.	113 50	144 06	44 00	3 00	301 61	—	—	—	10 00	116 66	42 01	774 84
Oct.	113 50	158 75	144 23	34 29	691 93	21 80	18 60	—	40 00	116 66	55 35	1,395 11
Nov.	118 50	151 77	110 18	42 50	—	59 95	—	7 00	—	116 66	62 72	669 28
Dec.	123 50	147 11	38 79	78 00	—	115 50	—	—	—	116 66	19 34	638 90
	\$1,610 00	\$1,926 01	\$1,817 78	\$1,943 92	\$4,164 19	\$734 49	\$120 00	\$46 00	\$161 75	\$1,399 92	\$417 77	\$14,341 83

CLASSIFICATION (B) OF PAYMENTS TO TOWNS AND CITIES.

To city of Boston, aid to paupers	\$631 70
“ “ Chelsea, “ “ “	141 35
“ “ Worcester, “ “ “	105 00
“ “ Cambridge, “ “ “	64 24
“ “ Lowell (Truant School)	146 46
“ “ Fall River, aid to paupers	2 20
“ “ Lawrence, “ “ “	96 00
“ “ Lynn, “ “ “	59 00
“ “ Newburyport, “ “ “	130 00
“ “ Taunton, “ “ “	2 00
Town of Peabody, “ “ “	267 97
“ “ Barnstable, “ “ “	52 00
“ “ Medford, “ “ “	48 00
“ “ Melrose, “ “ “	69 00
“ “ Andover, “ “ “	78 00
“ “ Holliston, “ “ “	78 00
	<hr/>
	\$1,943 92
	<hr/>

CLASSIFICATION (C) OF PAYMENTS TO PUBLIC INSTITUTIONS.

To State Hospital for the Insane at Danvers	\$1,750 24
Worcester Lunatic Ho-pital	1,257 82
Taunton “ “	180 46
Asylum for Chronic Insane at Worcester	357 39
Commonwealth of Massachusetts (board of paupers at Danvers and Tewksbury)	391 56
Master of House of Correction	143 43
Massachusetts General Ho-pital	43 00
City Hospital, Boston	31 00
Carney Hospital, “	9 29
	<hr/>
	\$4,164 19
	<hr/>

COMPARATIVE STATEMENT (D) OF EXPENDITURES IN THE SEVERAL
ACCOUNTS FOR 1885 AND 1886.

ACCOUNTS.	1885.	1886.
Rents	\$1,561 00	\$1,610 00
Board	2,264 07	1,926 01
Groceries	2,004 27	1,817 78
Dry Goods, and Boots and Shoes	233 37	166 00
Salaries	1,395 82	1,399 92
Fuel	1,076 27	734 49
Burials	377 00	161 75
Paid other cities and towns	1,719 11	1,943 92
Paid public institutions	5,459 28	4,164 19
Miscellaneous	340 13	417 77
Total	\$16,430 32	\$14,341 83

PAY-ROLLS (E) FOR 1885 AND 1886.

	1885.	1886.
January	\$2,578 43	\$3,296 01
February	1,198 38	965 30
March	2,293 47	908 12
April	1,400 97	1,805 75
May	639 81	662 41
June	1,211 58	972 22
July	2,373 39	1,663 89
August	710 83	590 00
September	898 50	774 84
October	1,773 42	1,395 11
November	434 94	669 28
December	916 60	638 90
Total	\$16,430 32	\$14,341 83

Excess of expenditures of 1885 over those of 1886, \$2,088.49.

STATEMENT (F) OF SUMS RECEIVED FROM OUTSIDE SOURCES.

SUPPORT OF POOR.

Credit.

Appropriation		\$15,000 00
City of Boston	\$189 50	
“ Newburyport	48 50	
“ Salem	10 50	
“ Malden	22 50	
“ Cambridge	154 55	
“ Lowell	49 50	
“ Fitchburg	21 00	
Town of Manchester	29 00	
“ Carlisle	59 90	
“ Natick	24 50	
“ Arlington	46 50	
“ Sandwich	45 75	
“ Medford	90 88	
“ Manchester	29 00	
“ Sunderland	7 00	
“ Woburn	27 00	
“ Sudbury	117 78	
“ Sudbury	24 93	
Commonwealth of Massachusetts	809 73	
“ burials	65 00	
S. W. Dow	212 17	
E. J. Jenkins	25 39	
Patrick Foley	13 13	
Felix Taylor	48 00	
J. A. Sawyer, administrator	42 00	
O. S. Knapp, guardian	95 32	
C. C. Folsom, “	160 74	
Elizabeth Abbott	12 00	
	<hr/>	2,481 77

\$17,481 77

Debit.

Expenditures		\$14,341 83
Unexpended balance		3,139 94
		<hr/> <hr/> \$17,481 77

NUMBER OF PERSONS SUPPORTED AND AIDED DURING 1886.

Persons assisted	896
Families "	201
Persons fully supported	77
Sane persons in almshouses and private families	28
Sick persons in hospitals and private families	11
Persons in House of Correction, Reform School, etc.	13
Insane persons and common drunkards, in hospitals and private families	25

REPORT
OF THE
BOARD OF HEALTH.

CITY OF SOMERVILLE.

IN BOARD OF ALDERMEN, Feb. 9, 1887.

Referred to the committee on printing, to be printed in the annual reports.
Send down for concurrence.

GEO. I. VINCENT, *Clerk pro tem.*

Concurred in.

IN COMMON COUNCIL, Feb. 10, 1887.

DOUGLAS FRAZAR, *Clerk.*

CITY OF SOMERVILLE.

OFFICE OF THE BOARD OF HEALTH,
CITY HALL, Jan. 31, 1887.

To his Honor the Mayor and the City Council :

GENTLEMEN, — In the discharge of our duty we submit the ninth annual report of this Board, showing, mainly in tabulated form, the principal part of the work accomplished, and the city's sanitary condition during the year ending Dec. 31, 1886.

MEMBERSHIP.

The membership of the Board was the same as in 1885. Jan. 12, George C. Skilton was reappointed for a term of two years.

ORGANIZATION.

Feb. 3, officers were elected as follows : —

GEORGE A. KIMBALL, *Chairman.*

GEORGE I. VINCENT, *Clerk.*

WILLIAM H. BRINE (40 Houghton Street), *Inspector.*

NUISANCES.

We show by the following table the number of nuisances of various kinds abated by our direction during the year, the months under which they are set being those in which the complaints were received : —

NUISANCES ABATED IN THE YEAR 1886.

	*January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Cellar damp	13	8	4	12	2	4	3	..	1	..	..	..	47
Cesspool defective . . . . .	..	..	1	..	..	2	..	..	..	..	..	..	3
" offensive . . . . .	..	..	2	..	2	..	..	..	..	..	..	..	6
" overflowing	1	..	2	6	..	3	..	..	..	..	..	..	12
Connections of drainage pipes defective	2	6	3	6	5	9	4	1	1	5	3	1	46
Drainage defective	11	5	3	12	2	8	3	2	5	4	3	3	61
" emptying into cellar	2	..	1	1	..	2	..	..	1	..	..	2	9
Drainage emptying on surface	1	..	..	4	1	2	..	1	1	1	2	1	14
Drainage not ventilated	9	5	2	..	2	21	3	4	5	3	6	1	61
Drain-pipe clogged . . . . .	..	..	..	..	..	..	..	..	..	..	1	2	3
" defective	2	6	4	2	2	4	2	1	1	1	4	2	31
Gas-pipe leaking . . . . .	..	..	..	..	..	..	1	..	..	..	..	..	1
Hennery offensive . . . . .	..	..	..	..	..	..	1	..	..	..	..	..	1
Hens kept in cellar	1	..	..	..	1	..	..	..	1	..	..	..	3
Manure exposed and offensive,	2	2	1	7	6	1	..	3	4	..	1	..	27
No house drainage facilities	2	..	..	1	..	..	..	..	..	..	..	..	3
Offal on land	3	..	1	3	2	1	..	1	1	1	..	..	13
Offensive odor from burning rubbish . . . . .	..	..	..	..	..	..	1	..	..	..	..	..	1
Offensive odor in and about dwellings	4	9	1	13	1	9	4	..	1	3	..	..	45
Opening in drain-pipe in cellar, . . . . .	..	1	..	..	1	..	..	..	..	1	3	..	6
Premises filthy	5	1	4	2	2	..	..	1	3	1	1	..	20
Privy-vault defective . . . . .	..	..	1	..	2	2	1	..	..	..	..	..	6
" full	3	2	1	9	17	12	4	1	3	4	1	2	59
" offensive	16	1	2	10	14	24	9	8	6	7	..	1	98
Slops thrown on surface	6	..	1	..	2	..	1	..	..	1	..	..	11
Stable and stable premises filthy and offensive	1	..	..	..	..	2	3	1	..	..	..	..	7
Stagnant water in house-cellar,	5	..	1	1	..	1	1	..	1	1	..	..	11
" on surface	4	1	3	..	1	1	..	..	1	1	..	..	12
Waste-pipe defective	3	3	2	..	3	2	..	..	1	..	..	..	14
" not trapped	28	5	9	8	19	19	11	2	5	2	20	7	135
Water-closet defective	4	1	2	1	..	3	1	4	1	1	..	..	18
" insufficiently supplied with water	4	2	3	2	..	8	4	4	2	2	..	..	31
Water-closet not sufficiently supplied with water	1	..	..	..	..	..	1	..	..	..	..	..	2
Water-closet offensive	8	1	4	2	3	10	4	5	1	3	2	..	43
Wooden waste-pipes and drains	2	..	1	..	2	..	..	1	..	1	..	..	7
Total	143	59	59	104	92	150	62	40	46	43	47	22	867

Number of nuisances abated	867
" " " referred to the Board of 1887	108
" " " complained of	975
" " complaints (many covering more than one nuisance)	405
" " houses ordered vacated	14

* Including nuisances referred to us by the Board of 1885.

Number of same since made habitable	12
“ “ same vacated in compliance with our orders	1
Number of same caused to be vacated by the chief of police at our request	2
Number of notices mailed	445
“ “ notices served by constables	18
“ “ letters written	78

The foregoing statement is exclusive of a large number of less serious causes of complaint which have been removed, and were caused, chiefly, by a lack of tidiness, which, if not corrected, would probably result in positive nuisances.

PERMITS.

Permits, expiring annually on May 1, have been issued for the keeping of swine and goats, and the collection of grease, the same as in previous years; the fees being two dollars for a grease permit and one dollar for each goat or swine.

SWINE. — Number for which permits were asked, 240; number for which permits were granted, 237; number for which they were refused, 3.

GOATS. — Applications received for 47; granted for 46; and refused for 1.

GREASE. — Number of applications, 11; number granted, 10; number refused, 1. Five of the parties who received permits reside in Somerville, three in Boston, and two in Cambridge.

We have recommended two residents of Somerville as proper persons to receive licenses to collect grease in Cambridge.

The Board of Health of Boston licensed 33 residents of Somerville to collect grease in that city during the year; and 6 of our citizens received similar licenses in Cambridge.

ASHES.

The contract with Martin Gill for removing ashes and house dirt, for the sum of eighteen hundred dollars for one year, expired April 29, and a new contract for the year commencing on that day was made with Jeremiah McCarthy, who was the lowest bidder, for the sum of seventeen hundred dollars.

The ashes, or other materials, must be set in barrels on the outer edge of the sidewalk, before nine o'clock of the day when

they are to be removed, and must not contain any filth or offal. They are removed on Wednesdays in Ward One, Thursdays in Ward Two, Fridays in Ward Three, and Saturdays in Ward Four. It is estimated that about nine thousand loads were removed during the year.

HOUSE OFFAL.

The contract with Christopher Burke for collecting the house offal, free of charge, expired June 26, and a contract for the term of three years from that date was made with Henry Gray, the lowest bidder, for a remuneration of nine hundred dollars per annum, and the offal. The collections should be made at least once each week in the months of December, January, February, and March; twice a week in the months of April, October, and November; and three times per week in the five remaining months. About three hundred cords were collected in the year 1886.

NIGHT-SOIL.

The removal of night-soil by the "odorless" process seems to give good satisfaction, as we receive no complaints. The contract is with Mr. R. M. Johnson, of Arlington, for the term ending Feb. 1, 1888, and the price charged is four dollars per load, or part of a load, of eighty cubic feet.

Order books may be found at the police station on Bow Street, and at the grocery store at the corner of Perkins and Franklin Streets. The contractor informs us that 533 loads were removed last year.

SEWERS.

We have had occasion every year to speak of the need of sewers in Lowell Street and vicinity, in Ward Three, but during the past year a system of sewers has been provided which will take the house drainage of all that section.

Sewers are still needed in Woodbine, Madison, and Montrose Streets, which are on the slope between Highland Avenue and the Lowell Railroad.

DEATHS.

Four hundred and ninety-two deaths have occurred during the year, and thirty still-births.

MORTALITY IN SOMERVILLE IN 1886.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
ZYMOTIC DISEASES.													
<i>Miasmatic.</i>													
Scarlet fever . . . . .	..	..	1	..	2	..	..	..	..	..	..	..	3
Diphtheria	1	2	..	1	4	2	1	..	2	2	2	3	26
Croup . . . . .	..	..	1	1	1	1	..	..	..	..	..	..	4
Typhoid fever . . . . .	..	..	..	..	..	..	..	..	..	2	1	..	3
Erysipelas . . . . .	..	..	..	..	1	..	..	..	..	..	2	1	4
Diarrhœa . . . . .	..	..	..	..	..	1	3	5	..	2	..	..	11
Cholera infantum . . . . .	..	..	..	..	..	..	10	9	6	..	1	..	26
Septicæmia . . . . .	..	..	..	1	2	..	..	1	..	1	..	..	5
Whooping cough	1	2	2	1	..	1	..	..	..	..	..	..	7
Phlebitis . . . . .	..	..	..	..	..	..	..	..	..	..	..	1	1
Measles . . . . .	..	..	..	..	..	..	..	1	..	..	..	..	1
Rheumatism . . . . .	..	1	..	..	..	..	..	..	..	1	..	..	2
<i>Dietetic.</i>													
Alcoholism . . . . .	..	..	..	..	..	..	..	..	..	..	1	..	1
CONSTITUTIONAL DISEASES.													
<i>Diatetic.</i>													
Anæmia . . . . .	..	..	..	..	..	..	1	..	..	..	..	..	1
Cancer . . . . .	..	2	..	1	..	..	4	1	1	..	..	..	9
Cancer of breast . . . . .	..	..	..	1	..	..	..	..	..	1	..	..	2
Cancer of liver . . . . .	..	..	..	..	..	..	..	..	..	..	..	1	1
Scrofula . . . . .	..	..	..	..	..	..	..	1	..	..	..	..	1
<i>Tubercular.</i>													
Tubercular meningitis	1	..	1	..	2	..	..	..	..	1	2	1	8
Marasmus	2	2	4	2	4	..	1	2	2	..	..	..	19
LOCAL DISEASES.													
<i>Nervous System.</i>													
Apoplexy	2	1	1	1	1	1	..	..	..	..	..	2	9
Paralysis . . . . .	..	..	1	2	1	..	1	1	..	2	3	..	11
Insanity . . . . .	..	..	..	..	..	..	..	..	1	..	..	2	3
Brain Disease	1	2	2	..	1	1	1	..	2	..	1	1	12
Meningitis . . . . .	..	1	..	2	2	2	1	..	1	2	..	..	11
Convulsions	1	1	3	..	1	..	2	1	..	..	1	..	10
Epilepsy . . . . .	..	..	..	..	..	..	..	..	..	..	..	1	1
Exhaustion	1	1	..	..	..	..	..	..	..	1	..	..	3
<i>Organs of Circulation.</i>													
Heart disease	6	3	3	4	..	4	3	2	1	4	2	1	33
<i>Respiratory Organs.</i>													
Pneumonia	2	7	1	5	3	..	3	2	1	5	3	7	39
Bronchitis	1	3	..	1	1	..	..	1	..	..	..	1	8
Hemorrhage . . . . .	..	1	..	..	..	..	..	..	..	..	..	..	1
Phthisis pulmonalis	2	3	7	10	11	8	11	9	8	8	8	8	93
Pleurisy . . . . .	..	1	..	..	..	1	..	..	..	..	..	..	2

MORTALITY IN SOMERVILLE IN 1886. — *Continued.*

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
<i>Digestive Organs.</i>													
Gastritis	1	..	2	3	..	..	..	..	..	..	..	..	6
Enteritis . . . . .	..	..	..	..	..	..	..	2	3	..	..	..	5
Peritonitis	1	2	..	1	1	2	..	..	..	2	..	1	12
Liver disease	1	2	..	..	2	..	..	..	2	..	2	..	9
Obstruction of bowels . . . . .	..	..	..	..	..	..	..	..	..	..	..	1	1
Hernia . . . . .	..	..	1	..	..	..	..	..	..	..	..	..	1
Abdominal Tumor . . . . .	..	..	..	..	..	1	..	..	..	..	..	..	1
<i>Genito-Urinary Organs.</i>													
Bright's disease	1	1	1	3	1	3	..	2	1	5	3	5	26
Diabetes . . . . .	..	..	..	..	..	..	..	..	1	..	..	..	1
Cystitis . . . . .	..	..	..	..	..	..	..	1	1	..	..	..	2
Addison's disease . . . . .	..	..	..	..	..	..	..	..	1	..	..	..	1
DEVELOPMENTAL DISEASES.													
<i>Of Children..</i>													
Premature birth and infantile debility . . . . .	..	3	..	..	1	1	4	2	3	1	2	2	19
Inanition . . . . .	..	1	..	..	..	..	..	..	..	..	..	..	1
<i>Of Old People.</i>													
Old age	2	2	4	..	5	1	..	..	3	3	..	..	20
General debility . . . . .	..	..	..	..	..	..	..	..	..	1	1	..	2
VIOLENT DEATHS.													
Asphyxia . . . . .	..	..	1	1	..	1	..	..	..	..	..	2	5
Accident . . . . .	..	..	..	..	..	..	1	1	..	..	..	..	2
Poisoning . . . . .	..	..	..	..	..	..	..	1	..	..	..	..	1
Railroad . . . . .	..	..	1	..	..	1	..	..	2	1	..	..	5
Burns . . . . .	..	..	1	..	..	..	..	..	..	..	..	..	1
<i>Suicide</i> . . . . .	..	..	..	1	..	..	..	1	1	..	..	..	3
<i>Unknown..</i> . . . . .	..	1	..	..	..	..	1	..	..	..	1	..	3
Total	27	45	38	42	47	32	48	46	43	45	38	41	492
Still-born †	2	4	1	..	3	3	3	1	5	3	2	3	30

Population (estimated) 31,746
 Death rate per thousand 15.50

DISEASES DANGEROUS TO PUBLIC HEALTH.

The prevalence of diseases adjudged dangerous to the public health has been less than in 1885, and nothing like an epidemic has occurred in any part of the city. Not a case of small-pox, varioloid, or typhus fever has been reported.

SCARLET FEVER. — Number of cases reported, 110. Number of deaths, 3. We have continued to placard all houses visited by this

disease with warning-cards, and they are also fumigated by the inspector after its termination.

DIPHTHERIA. — Number of cases reported, 91. Number of deaths, 20. Warning-cards are used in all cases of this disease, and as soon as a case is reported the premises are inspected, and the owner, agent, or occupant is required to remedy all sanitary defects as soon as practicable. The houses are also fumigated.

TYPHOID FEVER. — Number of cases reported, 20. Number of deaths, 3. We do not use warning-cards or fumigate in connection with this disease, but the premises are inspected, and sanitary defects are required to be remedied.

TABLES. — The usual tables are given of cases of scarlet fever, diphtheria, and typhoid fever, and of deaths from the same reported during the year; and of deaths of these three diseases in each of the last ten years; also the inspector's tabulated report of the sanitary condition of houses visited by diphtheria.

SCARLET FEVER, DIPHTHERIA, AND TYPHOID FEVER REPORTED IN 1886.

MONTHS.	SCARLET FEVER.			DIPHTHERIA.			TYPHOID FEVER.		
	Cases reported.	Number of deaths.	Percentage of deaths.	Cases reported.	Number of deaths.	Percentage of deaths.	Cases reported.	Number of deaths.	Percentage of deaths.
January	24	..	..	10	1	10	2	..	..
February	16	..	..	9	2	22	..	..	..
March	16	1	6	7	..	..	..	..	..
April	10	..	..	5	1	20	..	..	..
May	13	2	15	10	4	40	1	..	..
June	11	..	..	14	2	14	1	..	..
July	4	..	..	10	1	10	1	..	..
August	2	..	..	2	..	..	1	..	..
September	3	..	..	4	2	50	4	..	..
October . . . . .	..	..	..	3	2	67	3	1	67
November	5	..	..	8	2	25	3	1	33
December	6	..	..	9	3	33	4	..	..
Total	110	3	3	91	20	21	20	3	15

DEATHS FROM SCARLET FEVER, DIPHTHERIA, AND TYPHOID FEVER IN THE LAST TEN YEARS.

MONTHS.	SCARLET FEVER.								DIPHTHERIA.								TYPHOID FEVER.																
	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.			
January.	4	..	4	2	..	..	2	..	2	..	..	4	6	7	7	11	2	2	1	2	1	2	..	..	..	..	..	1	2	1	2	..
February	1	1	1	1	..	1	..	4	4	4	..	4	5	3	..	2	2	1
March . .	1	..	1	1	..	..	1	..	1	1	9	5	..	..	7	7	3	3	1	..	..	..	..	..	..	2	1	..	..	..	..	..
April . .	..	1	2	..	..	..	1	..	5	..	7	1	1	1	2	8	6	1	2	1	..	..	..	..	..	..	1	..	..	..	..	..
May . . .	..	..	..	..	1	..	..	..	..	2	8	..	..	..	3	5	1	2	2	4	..	..	..	1	..	..	..	1	..	..	..	..
June . . .	..	..	1	..	..	..	1	..	1	..	6	1	1	..	3	2	3	1	2	2	..	..	..	..	1	..	1	1	..	..	..	..
July . . .	1	..	2	..	..	..	2	..	..	..	1	2	..	..	2	1	3	2	2	1	1	1	..	1	..	..	1	1	1	1	1	..
August . .	2	..	..	..	..	1	..	..	..	..	3	1	4	..	3	..	1	..	2	..	..	2	..	1	..	..	..	1	1	1	1	..
September	..	..	..	2	..	..	1	1	..	..	4	1	2	..	2	1	1	4	3	2	..	1	1	..	1	..	1	3	2	2	3	..
October	3	1	4	2	5	..	2	6	1	2	2	1	2	..	1	1	..	2	2	1	3	..	1	2	..
November	1	4	3	..	..	..	3	2	..	..	5	1	2	1	2	7	1	4	5	2	..	..	..	1	1	1	..	..	2	1	1	..
December	1	7	2	..	..	2	..	1	1	..	8	5	4	8	3	4	5	1	4	3	2	1	1	..	1	1	..	1	1	..	..	..
Total . .	10	15	16	6	1	4	6	8	14	3	59	27	29	19	44	52	31	21	28	20	6	5	3	7	8	8	13	8	11	3	3		

Number of Family.	Nationality.	Occupation of Head of Family.	Number of Patient.	Sex of Patient.	Age of Patient.	Date of Sickness.	Result.	District.	Soil.	Locality.	House Drainage.	Condition of Cellar.	Privy.	Remarks.
1	American	Bookkeeper	1	Male	6	January		7	Gravel	Fair	Satisfactory	Good		Visited house where they had a case of diphtheria.
2	"	Salesman	2	"	7	"		2	"	Good	"			
3	"	"	3	Female,	4	"		5	"	"	Drainage defective	Damp		Privy vault offensive.
4	"	Clerk	4	"	6	"		5	"	Fair	Defective	"		[closet
5	"	Salesman	5	"	6	"		5	"	Good	Satisfactory			Insufficient supply of water in water-
6	"	Professor	6	Male	16	"	Fatal	5	Clayey gravel,	Good	Satisfactory	Dry		" " ventilated.
7	Nova Scotia	Carpenter	7	"	8	"		10	"	"	Drainage defective	"		" " "
8	American	Contractor	8	Female,	3	"		4	Sand	Fair	Waste-pipe not trapped	Damp		
9	"	Carpenter	9	Female,	16	"		10	Gravel	"	House drainage defective	Damp		Cesspool 4 feet from house.
10	"	Bookkeeper	10	"	14	"		2	"	"	"	Dry		Offensive odor in house from adjoining stables.
			11	Male	29	February		7	"	Good	Satisfactory			Defect at connection of soil and drain-pipe.
			12	"	2	"								
			13	Female,	30	"								
			14	"	20	"								
			15	"	4 mos.	March								
11	"	"	16	"	27	February		5	Clayey gravel,	Good	Drainage defective	Dry		Water-closet in cellar defective
			17	Male	21 mos.	"	Fatal							Soil-pipe not ventilated.
12	Irish	Laborer	18	"	22	"		1	"	Low	"	Not any		10 feet from house; offensive
13	American	Professor	19	Female,	20	"		10	Gravel	Good	Waste-pipes not trapped	Dry		Waste-pipe not trapped.
14	"	Salesman	20	"	32	March		7	"	"	"			House drainage not ventilated.
15	"	Merchant	21	"	54	"		5	Gravel	Good	Drainage defective	Dry		In same house as No. 10.
16	"	Clerk	22	"	3½	"		5	"	"	"			Waste-pipes not trapped.
17	"	Night watchman	23	Male	8	"		6	Clayey gravel,	Fair	"	Damp		House drainage ventilated. [No. 11; on the table.
18	"	Salesman	24	"	10	"		7	Gravel	Good	"	Dry		C'p'l 6 ft. fm. h., def'e; mother of this child atten. in fam.
			25	Female,	29	"					"			Waste-pipe not trapped; cessp'l 8 ft. from h. fl & off.
19	"	Insurance Agent	26	Male	38	"		7	"	Fair	Satisfactory	"		House drainage not ventilated.
20	"	Brakeman	27	Female,	20	April		9	"	Good	Drainage defective	"		Waste-pipe not trapped; con. of W. and D. P. defec.
21	"	Lather	28	"	20	"		9	"	Fair	"	Damp & offen'e odor in same,		Defect in drain-pipes in cellar.
22	Canadian	Laborer	29	"	2	"	Fatal	10	"	"	Drainage flowing on surface	"		Cesspool 3 ft. from house, full.
23	American	Produce	30	"	16	"		2	Clayey gravel,	Good	Drainage defective	Dry		Waste-pipe not properly trapped.
24	"	Salesman	31	"	5	"		5	Gravel	Low	"	Damp		House drainage defective.
25	Irish	Laborer	32	Male	9	May		2	Clayey gravel,	"	"	Not any; basement rooms		10 feet from house; full and offensive,
			33	"	2	"	Fatal				"			Waste-pipe not trapped.
26	Nova Scotia	Carpenter	34	Female,	51	"		1	"	Fair	"	Damp		8 " " " offensive
27	American	Superintendent	35	Male	9	"	Fatal	5	Gravel	Good	"			House drainage not ventilated.
28	"	Engineer	36	"	3	"		7	Clayey gravel,	Fair	Satisfactory	Dry		House dra'ge vent'd; child taken sick away from home.
			37	Female,	5	"					"			
29	"	Salesman	38	Male	4	"		2	Gravel	Good	"			House drainage ventilated.
30	"	Laborer	39	Female,	11	"		10	"	Fair	Drainage defective	Damp		12 feet from house; full and offensive,
31	"	Salesman	40	"	9	"		5	"	"	"			Waste-pipe not trapped.
32	"	"	41	Male	4	"	Fatal	5	"	Good	Drainage defective	Damp		House drainage not ventilated.
33	"	"	42	Female,	6	"		10	"	Fair	"	Dry		House drainage defective.
34	"	Carpenter	43	Male	9	June	Fatal	5	"	Good	"	Damp		Water-closet in cellar defective
35	"	"	44	Female,	14	"		5	"	Fair	"			Waste-pipes not trapped.
36	"	Machinist	45	"	20	"		2	"	Good	"	Dry		Waste-pipe not trapped.
37	"	Moulder	46	"	4	"		1	Clayey gravel,	Fair	Drainage defective			House drainage not ventilated.
38	"	Carpenter	47	"	6	"	Fatal	1	Gravel	"	"	Damp		Waste-pipe not trapped.
			48	Male	14	"					"			Water-closets defective
			49	"	3	"					"			" " "
39	Irish	Widow	50	Female,	8	"		1	"	Low	"	"		10 feet from house; offensive

Number of Family.	Nationality.	Occupation of Head of Family.	Number of Patient.	Sex of Patient.	Age of Patient.	Date of sickness.	Result.	District.	Soil.	Locality.	House Drainage.	Condition of Cellar.	Privy.	Remarks.
40	American	Driver	51	Male	4	July								
41	"	Machinist	52	Female	11	June		2	Gravel	Good	Drainage defective	Dry	8 feet from house; offensive	Waste-pipe defective.
42	"	Cooper	53	"	14	"		5	"	Fair	"	Damp	Water-closet defective and offensive,	Waste-pipes not properly trapped.
43	"	Butcher	54	"	6	"		5	Clayey gravel,	"	"	"	"	Waste-pipe not trapped.
44	"	Painter	55	"	6	"		1	Gravel	"	"	Dry	"	Waste-pipe not prop. trapped; house drain. not ven.
45	"	Clerk	56	Male	6	"		2	"	"	Drainage defective	Damp	"	House drainage not ventilated.
46	"	Engineer	57	"	6	July		4	"	"	"	"	"	"
47	"	Painter	58	Female	8	"		10	Sand	"	"	"	Water-closet in cellar defective	Drainage not ventilated.
			59	"	12	"		1	Gravel	Good	"	Dry	8 feet from house; full and offensive,	Waste-pipe not trapped.
			60	Male	4	"	Fatal.							
48	Irish	Merchant	61	Female	3	"		1	Clayey gravel,	Fair	"	Sewage flowing into cellar	"	"
49	American	Letter carrier	62	Male	7	"		5	"	"	"	Dry	Water-closet in cellar defective	House drainage not ventilated.
50	"	Laborer	63	Female	7	"		1	Gravel	Fair	Drainage defective	Damp	20 feet from house; full and offensive,	Waste-pipe not trapped.
51	"	Painter	64	Male	2	"		5	"	Good	"	Dry	Outlet of soil-pipe below chamber-windows.	House drainage defective.
52	"	Salesman	65	"	5	"		7	"	"	Drainage defective	"	"	House drainage defective.
53	Irish	Teamster	66	"	12	August		6	Clay	Low	"	Damp	4 feet from house; offensive	Stable adjoining house; offensive.
54	American	Salesman	67	"	26	"		5	Gravel	Fair	"	Sewage flowing into cellar	Water-closet in cellar defective	"
55	"	Carpenter	68	Female	15	September	Fatal	1	Clayey gravel,	Low	"	Damp	"	House drainage defective.
56	Irish	Laborer	69	Male	1½	"		3	Gravel	Fair	"	"	"	"
57	American	Salesman	70	"	11	"		9	"	Good	Satisfactory	"	"	House drainage ventilated.
58	"	Grocer	71	Female	5	"	Fatal	5	"	"	"	"	"	House drainage not ventilated.
59	Italian	Pedler	72	Male	8	October		1	"	Fair	Drainage defective	Damp	"	Waste-pipe not trapped.
60	American	Salesman	73	Female	10	"		10	"	Good	"	"	"	House drainage ventilated.
61	"	Engineer	74	"	10	November		9	"	"	"	"	"	"
			75	Male	4	"	Fatal.							
62	"	Agent	76	Female	9	"		5	"	"	Drainage defective	"	Waste-pipe not trapped	House drainage not ventilated.
63	"	Merchant	77	Male	7	"	Fatal	5	"	"	"	"	"	House drainage ventilated.
64	"	Barber	78	"	8	"		2	"	Fair	Drainage defective	Damp	10 feet from house; offensive	"
			79	Female	3	December	Fat							
65	"	Salesman	80	"	6	November		5	"	Good	"	Dry	Water-closet in cellar defective	Cesspool 4 feet from house.
66	"	Bookkeeper	81	Male	3	"		5	"	"	"	"	"	"
67	"	Tinsmith	82	"	7	"		9	Sand	"	"	"	"	House drainage not ventilated.
			83	Female	2	December								
68	"	Teamster	84	Male	3	"	Fat.	5	Gravel	Fair	"	Damp	"	Waste-pipe not trapped.
69	"	Printer	85	Female	6	"		7	"	Good	"	"	"	House drainage not ventilated.
70	Irish	Laborer	86	"	5	"		5	"	Fair	Drainage defective	Damp	"	"
71	"	"	87	Male	3	"	Fatal	5	"	"	"	"	20 feet from house; offensive	"
			88	"	6	"								
72	American	Salesman	89	Female	6	"		9	"	Good	"	"	"	House drainage ventilated.
73	"	Fruit & confectioner	90	"	20	"		1	"	Fair	Drainage defective	Damp	12 feet from house; full and offensive,	House drainage on surface.

DISTRICTS.

Our map of the city, with its health districts (explained in earlier reports), and the locations of dangerous diseases reported in 1886, is presented as usual. We also give various tabulated statements as to sanitary conditions, sickness, and death in these districts.

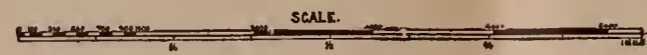
Our estimate of the population is based upon the presumption that the census population of 1885, as divided among the different health districts, would correspond with the distribution of poll-tax payers in those districts, and that the increase for the year was uniform.

TABLE OF DEATHS IN EACH DISTRICT DURING THE LAST THIRTEEN YEARS, EXCLUSIVE OF DEATHS IN THE McLEAN ASYLUM.

Districts . . .	I.		II.		III.		IV.		V.		VI.		VII.		VIII.		IX.		X.		Entire City.	
	No. of Deaths.	Rate per 1,000.	No. of Deaths.	Rate per 1,000.	No. of Deaths.	Rate per 1,000.	No. of Deaths.	Rate per 1,000.	No. of Deaths.	Rate per 1,000.	No. of Deaths.	Rate per 1,000.	No. of Deaths.	Rate per 1,000.	No. of Deaths.	Rate per 1,000.	No. of Deaths.	Rate per 1,000.	No. of Deaths.	Rate per 1,000.	No. of Deaths.	Rate per 1,000.
Area . . .	337 A.		107 A.		93 A.		171 A.		361 A.		285 A.		194 A.		482 A.		174 A.		456 A.		2,660 A.	
In 1886.	Population .	5,784	5,644	2,188	3,882	6,067	3,315	986	1,340	3,312	546	196	335	777	31,746							
	Dwellings .	894	832	350	614	999	312	546	312	999	312	196	335	777	5,245							
	Average in each dwelling.	6.5	6.8	6.2	6.3	6.1	4.3	6.1	4.3	6.1	4.3	5.0	5.3	4.7	6.1							
	YEAR.																					
1874	147	37	53	14	24	16	86	33	67	16	24	37	26	11	17	25	15	8	475	8	475	22
1875	149	37	84	22	26	17	56	21	75	18	32	29	32	14	13	19	17	15	486	15	486	22
1876	113	30	62	17	17	12	62	24	78	20	23	26	23	14	11	17	19	20	426	21	426	21
1877	126	32	57	15	18	12	57	22	61	15	31	34	29	13	12	18	32	17	428	20	428	20
1878	92	22	50	12	32	21	53	19	53	12	24	25	32	14	15	21	17	10	375	17	375	17
1879	92	21	50	12	29	18	62	22	77	17	14	14	22	9	14	19	16	13	385	16	385	16
1880	104	23	56	13	34	20	55	18	70	15	30	28	32	12	12	19	12	16	423	17	423	17
1881	111	23	64	14	41	23	48	15	62	12	36	32	38	14	18	22	19	18	445	17	445	17
1882	119	24	57	12	42	22	58	17	72	14	32	27	43	15	11	13	13	19	464	17	464	17
1883	138	26	59	12	49	25	60	17	76	14	40	33	51	17	17	19	28	18	527	18	527	18
1884	148	27	55	10	42	20	52	14	69	12	32	25	35	11	14	15	27	16	482	16	482	16
1885	152	28	56	11	40	19	72	20	78	14	31	24	53	17	13	14	25	15	581	18	581	18
1886	115	20	51	9	38	17	59	15	85	14	37	28	44	13	11	11	20	11	479	15	479	15
Thirteen years,	1,606	27	754	13	432	19	780	19	923	15	393	28	462	13	185	18	271	15	120	15	5,926	18

MAP OF SOMERVILLE.

1886.



SHOWING HEALTH DISTRICTS.
1886.



Sewers shown thus: - - - - -

TABLE SHOWING THE FIVE PRINCIPAL CAUSES OF DEATH IN SOMERVILLE IN 1886, WITH THE NUMBER AND RATE IN EACH DISTRICT.

DISTRICTS.	CONSUMPTION.		PNEUMONIA.		HEART DISEASE.		CHOLERA INFANTUM.		BRIGHT'S DISEASE.	
	No. of Deaths.	No. per 1,000 of pop.	No. of Deaths.	No. per 1,000 of pop.	No. of Deaths.	No. per 1,000 of pop.	No. of Deaths.	No. per 1,000 of pop.	No. of Deaths.	No. per 1,000 of pop.
I.	24	4.15	9	1.56	8	1.38	10	1.73	4	0.69
II.	9	1.59	1	0.18	4	0.71	1	0.18	1	0.18
III.	6	2.74	4	1.83	2	0.91	1	0.46	2	0.91
IV.	18	4.64	5	1.29	4	1.03	6	1.55	4	1.03
V.	11	1.81	9	1.48	6	0.99	1	0.16	5	0.82
VI.	9	6.72	2	1.49	4	2.99	4	2.99	1	0.75
VII.	10	3.02	5	1.51	2	0.60	1	0.30	3	0.90
VIII. . . . .	..	..	1	1.01	..	..	1	1.01	2	2.03
IX.	4	2.27	3	1.70	2	1.13	1	0.57	2	1.13
X.	2	2.57	..	..	1	1.29	..	..	2	2.57
Total	93	2.93	39	1.23	33	1.04	26	0.82	26	0.82

TABLE OF SCARLET FEVER, DIPHTHERIA, AND TYPHOID FEVER IN EACH DISTRICT IN 1886.

DISTRICTS.	SCARLET FEVER.				DIPHTHERIA.				TYPHOID FEVER.			
	Cases reported.	Deaths.	Cases per 1,000 of pop.	Deaths per 1,000 of pop.	Cases reported.	Deaths.	Cases per 1,000 of pop.	Deaths per 1,000 of pop.	Cases reported.	Deaths.	Cases per 1,000 of pop.	Deaths per 1,000 of pop.
I.	13	..	2.25	..	15	3	2.59	0.52	5	1	0.86	0.17
II.	10	..	1.77	..	12	2	2.12	0.35	5	..	0.89	..
III.	11	1	5.03	0.46	1	1	0.46	0.46	..	..	..	..
IV.	17	1	4.38	0.26	3	1	0.77	0.26	3	1	0.77	0.26
V.	21	..	3.46	..	29	10	4.78	1.65	2	..	0.33	..
VI.	4	1	2.99	0.75	2	..	1.49	..	..	..	..	..
VII.	18	..	5.43	..	14	1	4.22	0.30	2	1	0.60	0.30
VIII.	1	..	1.01	..	..	..	..	..	..	..	..	..
IX.	11	..	6.24	..	7	1	3.97	0.57	3	..	1.70	..
X.	4	..	5.15	..	8	1	10.30	1.29	..	..	..	..
Total	110	3	3.47	0.09	91	20	2.87	0.63	20	3	0.63	0.09

RATES PER THOUSAND OF POPULATION OF CASES OF SCARLET FEVER, DIPHTHERIA, AND TYPHOID FEVER REPORTED, AND OF DEATHS FROM THE SAME, IN THE LAST SEVEN YEARS.

DISTRICTS.	1880.			1881.			1882.			1883.			1884.			1885.			1886.			Average for Seven Years.		
	Scarlet Fever.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Diphtheria.	Typhoid Fever.	Scarlet Fever.	Diphtheria.	Typhoid Fever.
I.	{ Cases . . . { Deaths,	1.16 ..	2.42 0.88	3.08 0.44	..	2.39 ..	1.91 0.38	3.25 0.57	4.98 0.96	11.35 0.55	5.76 1.26	1.26 0.18	5.67 0.37	5.12 2.20	1.83 0.55	2.25 ..	2.59 0.52	0.86 0.17	3.49 0.19	4.95 1.65	3.30 0.38	3.49 0.19	4.95 1.65	3.30 0.38
II.	{ Cases . . . { Deaths,	1.35 ..	6.08 0.68	0.90 0.45	2.35 0.21	2.04 0.20	0.80 0.40	3.53 0.20	4.32 0.98	2.40 ..	1.11 0.37	1.66 0.19	2.63 0.19	1.50 0.41	1.50 0.19	1.77 ..	2.12 0.35	0.89 ..	2.03 0.08	2.96 0.51	0.81 0.20	2.03 0.08	2.96 0.51	0.81 0.20
III.	{ Cases . . . { Deaths,	0.58 0.58	8.72 1.74	0.58 ..	1.65 ..	7.90 3.16	0.53 0.53	3.04 ..	6.58 1.52	10.90 0.95	4.76 0.48	1.91 ..	8.70 0.97	1.45 0.48	0.48 ..	5.03 0.46	0.46 0.46	..	5.01 0.44	5.59 1.67	1.02 0.15	5.01 0.44	5.59 1.67	1.02 0.15
IV.	{ Cases . . . { Deaths,	1.64 ..	2.29 0.33	2.29 ..	0.62 ..	3.56 0.59	1.78 0.30	0.29 ..	5.42 0.57	8.86 ..	2.15 0.27	0.54 0.54	9.54 0.55	1.64 1.09	1.36 0.82	4.38 0.26	0.77 0.26	0.77	4.05 0.20	3.15 0.66	1.51 0.49	4.05 0.20	3.15 0.66	1.51 0.49
V.	{ Cases . . . { Deaths,	2.93 0.63	3.77 1.05	1.26 0.21	0.99 ..	8.54 2.28	0.95 0.19	2.74 ..	7.67 1.46	2.58 ..	3.43 0.52	1.20 0.34	6.98 0.17	2.97 0.17	0.17 0.17	3.46 ..	4.78 1.65	0.33 ..	3.14 0.16	4.74 1.07	0.89 0.24	3.14 0.16	4.74 1.07	0.89 0.24
VI.	{ Cases . . . { Deaths,	0.95 0.95	5.69 1.90	0.95 ..	..	16.32 7.73	0.86 ..	13.22 0.83	6.61 1.65	26.44 1.56	12.44 4.67	..	10.27 ..	16.59 3.16	0.79 ..	2.99 0.75	1.49 ..	..	8.30 0.59	9.60 3.08	0.83 0.12	8.30 0.59	9.60 3.08	0.83 0.12
VII.	{ Cases . . . { Deaths,	1.53 0.38	5.36 0.38	1.15 0.77	0.73 ..	7.30 2.08	0.35 ..	3.68 0.67	5.34 1.67	10.06 ..	3.14 0.31	0.63 ..	7.34 1.60	3.51 1.28	1.60 0.64	5.43 ..	4.22 0.30	0.60 0.30	4.51 0.38	4.94 0.96	0.72 0.29	4.51 0.38	4.94 0.96	0.72 0.29
VIII.	{ Cases . . . { Deaths,	1.29 ..	3.86 ..	1.29 ..	..	10.50 1.17	3.50 1.17	3.37 ..	7.86 ..	17.95 1.06	3.17 ..	2.11 1.06	7.51 ..	7.51 ..	6.44 1.07	1.01 ..	..	..	4.67 0.16	6.44 0.64	2.25 0.81	4.67 0.16	6.44 0.64	2.25 0.81
IX.	{ Cases . . . { Deaths,	2.88 ..	2.16 ..	0.72 ..	1.37 ..	1.31 0.65	..	2.51 ..	6.28 2.51	7.09 ..	3.55 ..	1.18 0.59	22.81 ..	3.60 ..	1.20 ..	6.24 ..	3.97 0.57	1.70 ..	5.59 ..	3.15 0.54	0.99 0.36	5.59 ..	3.15 0.54	0.99 0.36
X.	{ Cases . . . { Deaths,	3.27 ..	6.55 ..	1.64 ..	..	4.45 ..	7.42 2.96	..	2.85 ..	10.74 ..	..	1.34 ..	9.55 1.36	4.09 ..	2.72 ..	5.15 ..	10.30 1.29	..	5.32 0.20	4.71 0.41	2.05 0.61	5.32 0.20	4.71 0.41	2.05 0.61
City,	{ Cases . . . { Deaths,	1.72 0.24	4.32 0.76	1.56 0.28	0.95 0.04	6.24 1.89	1.38 0.29	2.93 0.21	5.44 1.08	8.21 0.26	3.64 0.69	1.18 0.26	7.54 0.47	3.67 0.93	1.37 0.37	3.47 0.09	2.87 0.63	0.63 0.09	3.84 0.21	4.52 1.08	1.46 0.32	3.84 0.21	4.52 1.08	1.46 0.32

NUISANCES ABATED IN EACH DISTRICT IN 1886.

DISTRICT.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	Total.
Population	5,784	5,644	2,188	3,882	6,067	1,340	3,315	986	1,763	777	31,746
Cellar damp	13	7	4	2	14	2	3	2	..	..	47
Cesspool defective . . . . .	..	..	..	..	..	1	..	..	..	2	3
" offensive . . . . .	..	..	..	..	..	..	1	..	..	2	3
" overflowing . . . . .	..	..	..	1	..	2	3	1	1	4	12
Connections of drainage pipes defective	10	1	5	1	16	..	6	..	5	..	46
Drainage defective	16	3	5	3	15	1	7	5	3	2	61
" emptying in cellar	2	..	2	1	2	1	1	..	..	..	9
" emptying on surface, not ventilated	3	1	..	2	1	2	..	3	1	1	14
" not ventilated	4	6	3	3	31	1	5	1	2	5	61
Drain-pipe clogged . . . . .	..	..	..	..	3	..	..	..	..	..	3
" defective	8	1	2	2	11	..	2	1	1	3	31
Gas pipes leaking . . . . .	..	..	1	..	..	..	..	..	..	..	1
Hennery offensive . . . . .	..	..	..	..	1	..	..	..	..	..	1
Hens kept in cellar	2	1	..	..	..	..	..	..	..	..	3
Manure exposed and offensive, No house-drainage facilities	9	1	3	3	4	1	2	2	..	2	27
Offal on land	1	..	..	..	..	..	..	2	..	..	3
Offal on land	8	1	..	2	..	..	1	..	1	..	13
Offensive odor from burning rubbish	1	..	..	..	..	..	..	..	..	..	1
Offensive odor in and about dwellings	11	4	4	2	15	2	3	2	1	1	45
Opening in drain-pipe in cellar, Premises filthy	1	..	..	..	2	..	2	..	1	..	6
Privy-vault defective	9	..	..	..	2	3	..	3	2	1	20
" full	1	1	..	1	1	..	..	1	1	..	6
" offensive	28	4	1	8	3	8	1	2	..	4	59
" full	22	6	11	18	13	9	4	8	5	2	98
Slops thrown on surface	4	1	..	2	..	..	..	2	1	1	11
Stable and stable premises filthy and offensive	3	..	..	..	1	..	2	..	1	..	7
Stagnant water in house-cellar, " on surface	3	..	..	3	1	1	3	..	..	..	11
" on surface	3	..	..	1	3	1	..	2	2	..	12
Waste pipe defective	2	1	1	1	5	..	3	1	..	..	14
" not trapped	23	16	4	6	52	2	15	5	5	7	135
Water-closet defective . . . . .	..	..	2	..	6	1	4	1	..	4	18
" insufficiently supplied with water, not supplied with water	4	6	2	..	8	1	4	..	2	4	31
" offensive . . . . .	..	..	1	..	..	..	..	..	1	..	2
Wooden waste pipes and drains	8	2	4	1	15	..	8	1	1	3	43
"	3	1	..	1	..	1	..	1	..	..	7
Total	202	64	55	64	225	40	80	46	39	52	867

APPROPRIATION FOR HEALTH DEPARTMENT, AND EXPENDITURES THEREFROM, 1886.

Appropriation	\$3,500 00
Receipts for permits to keep swine and goats and to collect grease	303 00
	<hr/>
Total credit	\$3,803 00

Expenditures:—

For inspector's salary	\$1,000 00
“ collecting ashes (including Decem- ber, 1885)	1,883 33
“ collecting offal (for 6 months)	450 00
“ fumigating (sulphur)	6 64
“ oil of peppermint	18 00
“ vaccine virus	14 50
“ burying dead animals	64 50
“ abating nuisances	82 32
“ books, stationery, and printing	53 85
“ serving notices in other cities	1 50
“ carriage hire	9 00
“ rent of post-office box	5 00
	<hr/>
Total debit	3,588 64
	<hr/>
Balance unexpended	\$214 36

GEORGE A. KIMBALL.
GEO. C. SKILTON.
THOS. M. DURELL, M. D.

INDEX

TO THE REPORT OF THE BOARD OF HEALTH.

	PAGE
Ashes	197
Dangerous diseases	200
Death-rate, 1886 (at end of mortality table)	200
Deaths	199
Diphtheria	201
Districts	203
Expenses	208
Goats	197
Grease	197
House offal	198
Map	204A
Membership	195
Night-soil	198
Nuisances	195
Organization	195
Permits	197
Population	200
Scarlet fever	200
Sewers	198
Swine	197
Typhoid fever	201

TABLES.

Diphtheria in 1886, inspector's report	202A, B
Mortality in Somerville, 1886	199
" rates of, in districts, 1874 to 1886	204
Nuisances abated, 1886	196
" " in districts, 1886	207
Principal causes of death, in districts, 1886	205
Scarlet fever, diphtheria, and typhoid fever, 1886	202
" " " " deaths in last 10 years,	202
" " " " in districts, 1886	205
" " " " " " in last 7 y'rs,	206

REPORT
OF THE
CITY PHYSICIAN.

CITY OF SOMERVILLE.

IN BOARD OF ALDERMEN, Feb. 9, 1887.

Referred to the committee on printing, to be printed in the annual reports. Sent down for concurrence.

GEO. I. VINCENT, *Clerk pro tem.*

IN COMMON COUNCIL, Feb. 10, 1887.

Concurred in.

DOUGLAS FRAZAR, *Clerk.*

CITY OF SOMERVILLE.

To his Honor the Mayor and the City Council :

GENTLEMEN, — I respectfully present my annual report as City Physician.

I have made during the year 1,813 visits ; of these, 303 were surgical, and 46 were made to persons at the police station. I have, in accordance with the law, viewed the bodies, and given certificates of the probable cause of death, of 11 persons, who died unattended by any physician. I have examined 22 persons supposed to be insane, and have given certificates in 17 cases.

I have vaccinated 201 persons free of expense. Twenty-two persons had teeth extracted at my office. I have examined six applicants for the police force.

Respectfully submitted,

THOS. M. DURELL, M. D.,

City Physician.

JAN. 28, 1887.

REPORT

OF THE

TRUSTEES OF THE PUBLIC LIBRARY.

CITY OF SOMERVILLE.

IN BOARD OF ALDERMEN, Jan. 26, 1887.

Referred to the committee on printing, to be printed in the annual reports. Sent down for concurrence.

GEO. I. VINCENT, *Clerk pro tem.*

IN COMMON COUNCIL, JAN. 27, 1887.

Concurred in.

DOUGLAS FRAZAR, *Clerk.*

CITY OF SOMERVILLE.

To the City Council :

The Trustees of Somerville Public Library, in making this their annual report, first desire to say that their experience of the last year reassures them that the expenditure for the erection of the new library building was wisely made. The community cannot fail to realize the facilities and accommodations which it furnishes ; at the same time they confess that their duties have become in a great measure thereby more enjoyable, if not better performed.

The amount expended for all purposes during the year will appear in the City Treasurer's statement appended hereto.

The number of books purchased in 1886, according to the report of the librarian, is 1,012. The whole number of books now in the library is 13,146.

It may be interesting to know the growth and use of the Public Library since its establishment. The following tables gleaned from the annual reports will furnish this information : —

Year.	Number in Library.	Books taken out.
1873	3,907	24,693
1874	4,730	Not reported.
1875	5,301	39,025
1876	5,752	46,800
1877	6,696	57,862
1878	7,441	61,076
1879	7,814	64,022
1880	8,506	67,895
1881	9,035	67,649
1882	9,766	67,673
1883	10,574	70,531
1884	11,197	72,591
1885	12,134	65,450*
1886	13,146	77,610

* In ten months.

For further information, attention is invited to the librarian's report.

Much care has been taken in studying and supplying such departments as were found deficient, and chiefly in the choice of books of a solid and standard character. Books of reference relating to art, scientific subjects, manufactures, trades, and mechanics have been furnished, resulting in a most valuable acquisition to the library. Unusual opportunities are now offered to those who may desire to investigate any special subject in the reference room, which will be found both a pleasant and profitable place of resort.

Not a few purchases have been made in compliance with requests of individuals whose judgment the Trustees have good reason to respect. It has been the policy of the Trustees to encourage the patrons of the library to make known their wishes, and to recommend such works as they may deem desirable to possess. The difficulty in selecting books, especially new publications, arises in a great measure from the difficulty of knowing the merits of an author without a personal perusal. It will be readily seen that a multiplicity of books renders this duty arduous. Any assistance, therefore, that can be rendered by those who have a personal knowledge is most welcome. It is not always safe to rely upon newspaper notices or criticisms, or the commendations of publishers. Nor can it be deemed advisable to rely too much on experiments or mere hearsay.

The aim should always be to provide what may be regarded the "best reading." To accomplish this may be quite feasible, if standard works of known value are only to be selected; but in dealing with the current literature of the day, an immense field must be explored, and hence the task becomes the more onerous.

The Trustees would briefly again invite a further consideration of the question how the Public Library can be made more serviceable and beneficial to the community, especially to the young, who, more than others, are its active patrons. The materials are all here with which to work.

Much might be said in the way of suggestion, as to what course a reader or student should pursue in order that he may make the most advantageous use of books, and in the adoption of some systematic course of reading. We leave the subject, however, for parents and teachers to consider.

Attention is respectfully invited to the condition of the grounds about the library building. It seems sadly out of place that the elegant structure, which has been erected at so much outlay, should not have its surroundings more in consonance with its character. What might have been made an attractive lawn with the adornment of a few flowers, has thus far been permitted to become overgrown with unsightly weeds.

To avoid a continuance of such a condition of things, the Trustees have taken the initiative of preparing the soil, so that in the coming season it may be in readiness for further improvements.

In closing, the Trustees take pleasure in giving their testimony to the fidelity and zeal with which the librarian and her assistants have discharged their duties.

CHAS. S. LINCOLN, *Chairman.*

DEC. 31, 1886.

LIBRARIAN'S REPORT.

The fourteenth year of our library work finds us in a condition to warrant the expenditure of increased appropriations, as larger means of usefulness are constantly presenting themselves. Books of more scientific and solid character are called for and more and more appreciated, while many do not yet know of the treasures contained in our collection, which they have but to ask for in order to receive.

During the past year many choice books have been placed in the reference department, such as

- North American Sylva, 2 vols.
- Standard Natural History, 6 vols.
- Holbein's Portraits.
- Ferns of North America, 2 vols.
- The Earth and its Inhabitants, 10 vols.
- Costumes of the Clans, 2 vols.
- Baronial Halls of England.
- National Costumes of Germany.

And also for general distribution the most desirable works on the labor question, electricity, science, and the best in books of travel, biography, and fiction.

We are indebted to those of our constant readers who suggest those works that are most useful in their several occupations, and find them generally excellent judges of what is most needed. Who knows so well as the workman himself what tools he can best use; and if we can only supply the needed tools for our young workmen, what monuments of fame may not be wrought by builders here!

Until recently we have had only books of moderate cost in unpretending bindings; now we have accommodation for choicer books, whose illustrations on subjects in which our people are interested many would be glad to see. We have never been able to purchase a set of "Audubon's Birds," nor until this present year any

volumes of colored engravings or books in which the costumes of the past could be shown to those curious to see, or desirous to copy them. Our books, when purchased, go into immediate circulation, and their well-worn condition shows their constant use. *Three* books have been given, and the wonder is that more have not been donated. What more fitting place to bestow a well-read book than the Public Library, where hundreds can have the benefit of it, and the giver have the satisfaction of knowing that a good selection has been made for the reading of others?

I find that in at least one library the gifts have sometimes outnumbered the purchases.

A new registration was commenced in January, 1885, since which time 5,415 names have been entered and cards delivered.

During the year, 77,510 books have been delivered, 8,687 books covered, and 2,000 postal cards sent for books overdue. We have had, including periodicals, 407 volumes bound. These can seldom be bound a second time; 145 books have been worn out and withdrawn, and, where it was possible, replaced.

The use of reference books has nearly doubled; the number recorded last year being 642, and this year 1,200.

The following table shows the percentage of books taken in the various departments:—

Fiction, including juvenile	71
History and travel	9
Essays and science	8
Periodicals and drama	6
Biography	4
Poetry	2

The number of books in the library is 13,146, and at the annual examination none were missing.

HARRIET A. ADAMS, *Librarian.*

DEC. 31, 1886.

FINANCIAL STATEMENT OF CITY TREASURER.

CR.	
Balance from 1885	\$402 60
Appropriation	2,500 00
Transferred from interest account	409 73
Dog licenses	1,728 54
Fines	274 69
Catalogues	36 60
City of Boston, discount on water bill	1 20
	<hr/> \$5,353 36

DR.	
Salaries	\$1,537 17
Books	2,325 03
Printing and stationery	189 32
Catalogues	128 51
Binding	139 19
Newspapers	12 00
Furniture	157 80
Gas governor	60 00
Gas	173 91
Fuel	171 45
Water	20 00
Repairs	209 23
Labor	130 00
Expressing	39 60
Incidentals	60 15
	<hr/> \$5,353 36

REPORT
OF THE
COMMITTEE ON HIGHWAYS.

CITY OF SOMERVILLE.

IN BOARD OF ALDERMEN, Jan. 1, 1887.

Accepted, and referred to the next city council, to be printed in the annual reports. Sent down for concurrence.

GEO. I. VINCENT, *Clerk pro tem.*

IN COMMON COUNCIL, Jan. 1, 1887.

Concurred in.

DOUGLAS FRAZAR, *Clerk.*

CITY OF SOMERVILLE.

IN COMMITTEE ON HIGHWAYS, Dec. 31, 1886.

To the City Council of Somerville:

The following is the final report of the committee on highways for the year 1886:—

HIGHWAYS ACCOUNT.

CREDIT.

Appropriation:—

Amount first appropriated . . .	\$32,000 00	
Transfer from interest account . . .	200 00	
		\$32,200 00

Receipts and credits:—

For labor and materials furnished prior to Jan. 1, 1886, the bills for which remained uncollected that day . . .			\$148 88
pasturage on Walnut Hill lot, Broadway, in 1885			5 00
rent of dwellings at City Farm			\$136 00
less repairs, insurance, and water rates			134 14
			1 86
excess of charges for materials over the cost			249 12
gross earnings of city teams, at \$1.40 per day for each horse			\$6,052 20
less cost of maintenance as hereinafter specified, 5,092 05			960 15
			1,365 01
Value of materials on hand Jan. 1, 1886			9,057 41
Value of property on hand Jan. 1, 1886			1,026 52
			\$43,648 94

DEBIT.

Expenditures : —

For construction of Dartmouth Street, from Broadway to Evergreen Avenue (laid out in 1885)	\$175 51
construction of Park Avenue, from Elm Street to Wallace Street (laid out in 1885)	271 85
laying out of Berkeley Street, from School Street to Central Street (recording release and advertising notice)	13 95
laying out of Dartmouth Street, from Medford Street to Evergreen Avenue (recording release and advertising notice)	13 25
laying out of Grove Street, from Elm Street to Lexington and Ar- lington Railroad (recording re- lease and advertising notice)	12 50
laying out of Irving Street, from Hol- land Street to Broadway (record- ing release and advertising notice)	12 65
laying out of Preston Street, from School Street to Summer Street (recording release and advertising notice)	12 50
street crossings	1,166 85
street signs	10 30
clearing and repairing streets after the laying of horse railroad tracks :	
Broadway, from Franklin Street to Autumn Street	\$94 68
Elm and Holland Streets from Russell Street to Elmwood Street	807 32
Washington Street, from Union Square to Mystic Street	145 79
	<hr/>
	1,047 79
<i>Amount carried forward</i>	<hr/> \$2,737 15

<i>Amount brought forward</i>		\$2,737 15
For repairs and improvements of streets and paving of gutters in connec- tion with the setting of edgestones :		
Benedict Street, both sides, from Austin Street to Benedict Avenue, paving	\$119 75	
Broadway, at I. L. Russell's, corner North Street, paving	69 90	
Dartmouth Street, west side, from Broadway to Evergreen Avenue, paving	249 96	
Dartmouth Street, at F. Fuller's, east side, paving	24 00	
Dover Street, west side, from Davis Square to Cambridge line, paving	317 63	
Elm Street, at D. W. Lowell's, cor- ner Morrison Street, paving	33 32	
Gilman Street, both sides, near Aldrich Street, extension west- wardly, paving	105 39	
Highland Avenue, at J. Medina's block, paving	30 40	
Maple Street, south side, near Medford Street, paving	57 36	
Medford Street, east side, from Somerville Avenue to Wash- ington Street, paving	481 08	
Medford and Shawmut Streets, at J. A. Talpey's corner, paving,	16 48	
Morrison Street, both sides, from Elm Street to Grove Street, paving	419 56	
repairs	308 06	
North Street, at I. L. Russell's, corner Broadway, paving	68 56	
Park Avenue, both sides, from		
<i>Amounts carried forward</i>	\$2,301 45	\$2,737 15

<i>Amounts brought forward</i>	\$2,301 45	\$2,737 15
Elm Street to Wallace Street, paving	258 76	
Spring Street, west side, from Somerville Avenue to Pitman Street, paving	58 12	
Shawmut Street, both sides, from Washington Street to Medford Street, paving	216 64	
repairs	79 73	
Summit Avenue both sides, from Walnut Street to Vinal Avenue, paving	385 82	
repairs	282 88	
Tufts Street. from Washington Street to Cross Street, paving east side	369 10	
repairs	408 62	
	<hr/>	4,361 12
For reconstructing brick sidewalks and gutters west side of Cedar Street, from Elm Street to Summer Street	. . . . .	789 07
repairing Cedar Street from Elm Street to Summer Street . . . . .	. . . . .	429 46
reconstructing brick sidewalk and gut ter east side of Laurel Street, from land of Tufts to land of Cutter . . . . .	. . . . .	116 99
ordinary repairs of streets : —		
Bond Street, from Broadway to Heath Street	89 67	
Broadway, north side, from Lin coln Street to Wheatland Street	859 46	
Broadway, south side, from Boston Line to Autumn Street.	368 32	
Broadway and Marshall Street, from Dartmouth Street to Oak land Avenue	729 81	
Cross Street, from Medford Street to railroad bridge	77 48	
	<hr/>	<hr/>
<i>Amounts carried forward</i>	\$2,124 74	\$8,433 79

<i>Amounts carried forward</i> . . .	\$2,124 74	\$8,433 79
Elm Street, from Somerville Avenue to Davis Square . . .	2,400 88	
Franklin and Perkins Streets, from Pearl Street to Boston Line	585 52	
Highland Avenue, from Cherry Street to Willow Avenue . . .	461 27	
Highland Avenue, from Davis Square to Grove Street . . .	437 05	
Lowell Street, from Wilton Street to Vernon Street . . .	386 74	
Medford Street, from Highland Avenue to Central Square . . .	458 84	
Mt. Vernon Street, from Washington Street to George Street,	686 65	
Myrtle Street, from Washington Street to top of hill	410 28	
Mystic Avenue, from Chauncey Avenue to Medford Line . . .	1,588 84	
Walnut Street, from Broadway to Bonair Street	294 43	
Willow Avenue, from Highland Avenue to Lexington and Arlington Railroad	245 10	
general repairs	6,974 66	
	<hr/>	17,055 00
For repairs of stone paving		294 45
“ of brick sidewalks		695 12
resetting edgestones, Davis Square		66 79
cost to city of sidewalks, the bricks and edgestones for which were furnished by the abutters		243 03
clearing and repairing streets after the construction of sewers and catch-basins		102 46
removing snow and ice, and care of slippery sidewalks		1,451 69
cleaning streets		2,168 36
one half cost maintaining Middlesex Avenue bridge for the year 1885, the other half being paid by the town of Medford		371 33
<i>Amount carried forward</i>		<hr/> \$30,882 02

<i>Amount brought forward</i>		\$30,882 02
For setting trees furnished by citizens		63 35
trimming trees		18 00
drinking fountain (for horses) in Union Square, new fountain and repairing old one		178 90
repairing W. C. T. U. fountain in Union Square, and ice for same		31 50
tax on Waltham gravel land		114 75
tax on Wakefield gravel land	\$25 26	
less received for gravel sold	15 20	
		<u>10 06</u>
tax on Winchester gravel land		10 95
repairing tools		339 70
salary of superintendent		1,500 00
board of superintendent's horses		417 17
rent of superintendent's telephone		41 60
books, stationery, and printing		46 50
sundry small expenses		20 05
private work, etc., the bills for which remain uncollected		195 71
Value of tools, etc. Jan. 1, 1886	\$372 21	
added during the year	230 72	
		<u>\$602 93</u>
Total	\$602 93	
value of same, Dec. 31, 1886	372 50	
		<u>230 43</u>
Depreciation		230 43
Value of materials on hand, Dec. 31, 1886		1,226 15
Value of property on hand, Dec. 31, 1886 :—		
horses	\$4,125 00	
carts and implements used with horses	1,881 25	
harnesses and horse clothing	377 25	
stable utensils and property	167 50	
stone crusher, engine, and fittings	1,317 25	
tools, tool chests, and tool house	372 50	
		<u>8,240 75</u>
Total debit		\$43,567 59
Balance unexpended		<u>\$81 35</u>

The earnings and expenses [of the city teams have been as follows : —

Earnings, at \$1.40 per day for each horse	\$6,052 20	
<hr/>		
Expenses : —		
For grain and feed	\$1,392 18	
hay and straw	472 09	
shoeing	382 05	
doctoring and medicine	120 68	
repairs of carts and implements used with horses,	309 17	
“ harnesses and horse clothing	116 31	
stable expenses (including pay of stable-man)		
and repairs of stables	1,283 69	
Value of carts and implements used with horses, Jan.		
1, 1886	\$2,124 50	
added during the year	\$60 00	
insurance	15 00	
	<hr/>	
	\$75 00	
less remains of burnt		
wagon sold	5 00	
	<hr/>	
	70 00	
	<hr/>	
Total	\$2,194 50	
value of same, Dec. 31, 1886	1,881 25	
	<hr/>	
Depreciation	313 25	
Value of harnesses and horse clothing,		
Jan. 1, 1886	\$506 75	
added during the year	28 60	
	<hr/>	
Total	\$535 35	
value of same, Dec. 31, 1886	377 25	
	<hr/>	
Depreciation	158 10	
Value of horses (19), Jan. 1, 1886	\$4,600 00	
insurance	35 00	
	<hr/>	
Total	\$4,635 00	
	<hr/>	
Amount carried forward	\$4,547 52	

<i>Amount brought forward</i>		\$4,547 52
Value of horses (16), Dec. 31, 1886	\$4,125 00	
	<hr/>	
Depreciation (including three that died),		510 00
Value of stable utensils and property,		
Jan. 1, 1886	\$192 50	
added during the year	9 53	
	<hr/>	
Total	\$202 03	
Value of same, Dec. 31, 1886	167 50	
	<hr/>	
Depreciation		34 53
		<hr/>
Total expense		\$5,092 05
		<hr/>
Excess of earnings, as hereinbefore stated, under the heading of receipts and credits		\$960 15
		<hr/> <hr/>

The charges for crushed stone, and the cost of the same, have been as follows:—

Charges:—

For 10,029 loads used (price at crusher, 75c. per load)	\$7,521 75
500 loads on hand, Dec. 31, 1886, at 75c.	375 00
	<hr/>
Total of charges	\$7,896 75
	<hr/>

Cost:—

For 600 loads of crushed stone on hand Jan. 1, 1886, at \$1.00	\$600 00
9,713 loads of ledge and field stone delivered at crusher, at 45 cents	4,370 85
labor and teaming at crusher, including pay of engineer	2,378 39
new sheds	130 86
repairs of crusher and engine	34 60
fuel	199 82
water	28 57
oil	33 10
boiler insurance	15 00
	<hr/>
<i>Amount carried forward</i>	\$7,791 19

<i>Amount brought forward</i>		\$7,791 19
Value of crusher, engine, and fittings, Jan. 1, 1886	\$1,261 45	
added during the year	216 72	
	<hr/>	
	\$1,478 17	
less old fittings sold	65 54	
	<hr/>	
	\$1,412 63	
value of same Dec. 31, 1886	1,317 25	
	<hr/>	
Depreciation		95 38
Total cost		<hr/>
		\$7,886 57
		<hr/>
Excess of charges over cost		<u>\$10 18</u>

The charges for Holland Street ledge stone and the cost of the same have been as follows : —

Charges : —

For 9,216 loads of ledge stone delivered at crusher, at 45 cents	\$4,147 20	
1,797 loads of ballast for streets, price at ledge, 10 cents	179 70	
293 loads of ledge stone quarried by the purchasers, at 30 cents	87 90	
	<hr/>	
Total of charges		\$4,414 80

Cost : —

For labor and teaming	\$3,946 00	
powder and fuse	458 41	
	<hr/>	
Total cost		4,404 41
		<hr/>
Excess of charges		<u>\$10 39</u>

Labor and materials have been furnished to other accounts, and to private parties, and the Treasurer has received payment for the same, as follows : —

Broadway Park Maintenance account	\$847 47
Fire Department account	6 00
	<hr/>
<i>Amount carried forward</i>	<u>\$853 47</u>

<i>Amount brought forward</i>	\$853 47
Health Department account	87
Miscellaneous account (City Hall)	17 64
Schoolhouse Incidentals account	1 50
Sidewalks account	829 41
Private parties	680 84
Total	<u>\$2,383 73</u>

SIDEWALKS ACCOUNT.

CREDIT.

Appropriation	\$4,000 00
-------------------------	------------

DEBIT.

Expenditures: —

For sixteen sidewalks, as per accompanying schedule	\$7,196 64
less assessments	3,598 32
Net cost to city	<u>\$3,598 32</u>

Advertising notices of hearings for sidewalks in Oliver Street, Quincy Street, Elm Street and Warren Avenue (not built) \$40 20

Advertising for proposals for edgestones 5 50

Printing blank orders for hearings 8 00

\$53 70

Less cost of advertising Spring Street and Morrison Street sidewalks paid in 1885 (sidewalks constructed this year) 20 40

33 30

Net expenditure \$3,631 62

Balance unexpended \$368 38

BROADWAY PARK MAINTENANCE ACCOUNT.

CREDIT.	
Appropriation	\$1,000 00
Receipts for hay sold	10 05
Value of property (tools, etc.) on hand	
Jan. 1, 1886	269 47
	<hr/>
Total credit	\$1,279 52
DEBIT.	
Expenses: —	
For labor and teaming	\$786 47
dressing	61 00
repairing tools and property	28 40
iron and hardware	7 61
incidentals	3 11
bedding plants	30 00
lighting lamps	11 00
raising and lowering flag	2 00
Value of property on hand Dec. 31, 1886	
(including purchases during the year,	
• \$2.70)	209 85
Depreciation in value of property	62 32
	<hr/>
Total debit.	1,201 76
	<hr/>
Balance unexpended	<u>\$77 76</u>

NEW STREETS AND SIDEWALKS.

Five streets have been accepted this year, as stated in the accompanying table, but no work has been done upon either of them.

Of the five streets accepted last year, two have been constructed this year,— Dartmouth Street from Broadway to Evergreen Avenue, and Park Avenue from Elm Street to Wallace Street, — and gravel sidewalks, with edgestones, have been constructed on both sides of the last named and on the westerly side of the other.

The particulars of streets constructed and improved, and of sidewalks built, are contained in tables herewith presented.

An unusually large number of sidewalks have been built this year, and have formed the basis for substantial improvements in all the streets where they are located, as it is the invariable custom to pave the gutters appurtenant to the sidewalks, and to grade and repair the street to correspond with the uniform grade thus established.

We know of no expenditure that gives better satisfaction to the public, and at the same time proves more economical for the city, than that paid for sidewalks and the accompanying improvements, and we hope as many sidewalks will be built every year as the city can afford.

HORSE RAILROADS.

Elm and Holland Streets, between Russell Street and the City Ledge, have been in bad condition for some years, because the tracks of the Cambridge Railroad Company were laid too low. We therefore requested the company to bring its rails up to a proper grade, and the request was promptly complied with. A great improvement in these streets has thus been made.

Late in the year the Boston Consolidated Street Railway Company obtained locations for additional tracks in Broadway from Franklin Street to Temple Street, and in Washington Street from Tufts Street to Union Square. The tracks were laid in Broadway from Franklin Street to Autumn Street, and in Washington Street from Union Square to Mystic Street, when the work was stopped by bad weather.

PAVING SOMERVILLE AVENUE.

We renew the recommendation of our immediate predecessors, that measures be taken for paving Somerville Avenue, and suggest that a beginning be made by paving Union Square. The travel is so great over this thoroughfare that the macadam placed upon it lasts but a very short time.

GRAVEL.

The highway committees of previous years have been more or less hampered for the want of good gravel, and this committee determined, if possible, to open the city's gravel bank at Waltham, which we knew contained gravel of excellent quality, and arrange

for the transportation of the material to Somerville. Accordingly an agreement was obtained from the Fitchburg Railroad Company to put in a switch and lay a track to the bank at the company's expense, and to deliver five thousand yards, or more, of gravel on the line of the road in Somerville for thirty cents per yard; the loading to be done by the city. In this way we have obtained the gravel required for the purposes of the department during the season.

Of course, the work of opening the bank and removing the refuse earth has made the gravel used this year cost rather high, but we believe it can be delivered on our streets hereafter at a moderate cost.

SCHEDULES.

The following schedules give additional particulars of the work of the department during the year.

STREETS ACCEPTED IN 1886.

Name.	From	To	Length in feet.
Berkeley.	School St.	Central St.	1,361.8
Dartmouth.	Medford St.	Evergreen Ave.	737.0
Grove.	Elm St.	Middlesex Cen. R. R.	585.0
Irving.	Holland St.	Broadway.	1,750.0
Preston.	School St.	Summer St.	839.1
Total.	.	.	4,697.9

STREETS IMPROVED.

Name.	From	To	Improvement.	Feet.
Bond	Broadway	Heath	Grad'g and macadamizing,	300
Broadway, So. side,	Boston Line	Autumn	Re-macadamizing	2,800
"	Dartmouth	Marshall	"	400
" No. side,	Lincoln	Wheatland	"	2,700
Cedar	Elm	Summer	Grad'g and re-macad'izing,	1,000
Cross	Medford	Railroad Bridge,	Re-macadamizing	300
Dartmouth	Evergreen Ave.	Broadway	Grad'g and re-macad'izing,	650
Dover	Cambridge Line,	Davis Square	Re-macadamizing	950
Elm	Davis Square	Craigie	"	4,800
"	Russell	Davis Square	Filling and macadamizing,	900
Franklin	Pearl	Perkins	Re-macadamizing	450
Highland Ave	Cherry	Willow Ave	"	850
"	Davis Square	Grove	"	1,700
Holland	Arlington R. R.,	Elmwood	Filling and macadamizing,	1,400
Lowell	Wilton	Vernon	Macadamizing	300
Marshall	Broadway	Oakland Ave	Re-macadamizing	250
Medford	Highland Ave	Central Square	"	1,000
Morrison	Elm	Grove	"	500
Mt. Vernon	Washington	George	"	1,300
Myrtle	"	To top of hill	Grad'g and re-macad'izing,	650
Mystic Avenue	Chauncy Ave	Medford Line	Re-macadamizing	3,700
Perkins	Franklin	Boston Line	"	1,350
Shawmut	Washington	Cross	Grad'g and macadamizing,	550
Summit Avenue	Vinal Avenue	Walnut	Re-macadamizing	450
Tufts	Washington	Cross	Grad'g and macadamizing,	950
Walnut	Broadway	Bonair	Re-macadamizing	600
Washington Ave	Washington	"	Macadamizing	350
Willow Ave	Highland Ave	Arlington R. R.	Re-macadamizing	400
Total				31,550

SIDEWALKS CONSTRUCTED WHERE THE MATERIALS AND LABOR WERE FURNISHED BY THE CITY, AND ONE HALF THE COST WAS ASSESSED ON THE ABUTTING ESTATES.

Street.	From	To	Feet of Edgestone.	Yards of Brick.	Cost.
B'dway, northeast side,	North St	Northwesterly	116.2	112.5	\$194 60
Dartmouth, west side .	Broadway	Evergreen Av.	710.4		491 40
Davis Sq., south side .	Elm St.	Highland Av.	38.5	268.2	332 01
Dover, northwest side .	Davis Sq.	Cambridge Line	936.1	600.9	1,116 74
Elm, east side	Morrison St.	Southerly		80.5	74 22
Gilman, both sides . . .	Angle	Northwesterly	341.5	209.2	464 50
Medford, east side . . .	Somerville Av.,	Near Washington St.	877.0		579 46
Morrison, both sides . .	Elm St.	Grove St.	1098.4		629 57
Morrison, south side . .	Elm St.	Grove St.		354.3	301 72
North, northwest side .	Broadway	Northeasterly	114.5	76.9	140 50
Park Av., both sides . .	Wallace St.	Elm St.	904.6		517 18
Shawmut, east side . . .	Washingt'n St.,	Cross St.	531.1		422 56
Spring, west side	Somerville Av.,	Pitman St.	173.2		118 66
Summit Av., north side,	Walnut St.	Vinal Av.	548.5		400 83
Summit Av., south side,	Walnut St.	Vinal Av.	540.5	419.8	804 30
Tufts, northeast side . .	Cross St.	Washington St.	987.6		608 39
Totals			7918.1	2122.3	\$7,196 64

SIDEWALKS CONSTRUCTED WHERE EDGESTONES AND BRICKS WERE FURNISHED BY THE ABUTTERS.

For	Street.	Length of Edgestones.	Yards of Brick.
S. R. Chase . . .	Benedict	77.7	62.6
James Coliton . .	Maple	60.6	..
Charles Drouett .	Columbus Avenue . . .	..	25.7
Fred C. Fuller . .	Dartmouth	46.6	..
J. A. Litchfield .	Sycamore	25.6	16.9
John Manning . .	Maple	89.7	..
John Medina . . .	Highland Avenue . . .	62.4	..
Peter Murray . . .	Maple	31.3	..
J. W. Rand	Benedict	86.9	60.1
C. B. Sanborn . . .	Austin . . . . .	..	34.9
J. A. Talpey . . .	Medford, Junction Shaw- mut	30.1	..
Totals . . . . .	. . . . .	510.9	200.2

DRIVEWAYS CONSTRUCTED (AT EXPENSE OF ABUTTERS).

For	Street.
Silas L. Cummings.	Elm.
Edward Glines.	Highland Avenue.
H. S. Pond.	Vinal Avenue.
Marion Spry.	Somerville Avenue.
Quincy A. Vinal, Trustee.	Adams Street.

DRIVEWAYS DISCONTINUED (AT EXPENSE OF ABUTTERS).

City (Miscellaneous Account).	At City Hall.
-------------------------------	---------------

CROSSINGS CONSTRUCTED.

Austin Street, across end of Benedict Street.
 Broadway, from westerly side of Rush Street.
 " " " easterly side of Glen Street.
 Central Street, across the end of Willoughby Street.
 Dover Street, near horse-car stables.
 " " " westerly side across end of court.
 Elm Street, across the end of Park Avenue.
 " " " " Morrison Street.
 " " " " from northerly side of Park Avenue.
 Gilman Street, northerly side across Aldrich Street.
 " " " " in line with easterly side of Aldrich Street.
 Holland Street, from easterly side of Wallace Street.
 Park Avenue, across the end of Chandler Street.
 School Street, in line with northerly side of Evergreen Avenue.
 Tufts Street, across end of Glen Street.
 Washington Street, across the end of Charles Street.
 " " " " Mystic Street.
 " " " " Tufts Street.
 " " " " from westerly side of Franklin Street.

CULVERTS CONSTRUCTED.

Cambria Street, iron, under northerly sidewalk, 1.
 Central Street, pipe, easterly side at railroad bridge, 1.
 School Street, wooden, easterly side at railroad bridge, 1.
 Walnut Street, wooden, easterly side at railroad bridge, 1.
 Willow Avenue, wooden, westerly side at railroad crossing, 1.

DANGER SIGNS ERECTED.

Allen Street, at Somerville Avenue.
 Avon " " School Street.
 Bartlett " " Washington Street.
 Boston " " Greenville "
 " " " Washington "
 Bow Street Place, at Bow "
 Cambria Street, " Central "
 Dartmouth " " south side Evergreen Avenue.

Emerson Street,	at	Everett Street.
Essex	“	“ Medford Street.
Everett	“	“ Brick Yard Lane.
“	“	“ Emerson Street.
Greenville	“	“ Boston Street.
Hawkins	“	“ Somerville Avenue.
“	“	“ Washington Street.
Hudson	“	“ Cedar “
“	“	“ Central “
Kingman Court,	“	Washington “
Linden Street,	“	Somerville Avenue.
Maple Avenue,	“	Marshall Street.
Montrose Street,	“	School “
“	“	“ Sycamore “
Munroe	“	“ Walnut “
Mystic	“	“ Benedict “
“	“	“ Mystic Avenue.
“	“	“ Somerville Avenue.
New Church Street,	at	Somerville Avenue.
Oxford	“	“ Central Street.
“	“	“ School “
Pembroke	“	“ Central “
“	“	“ Sycamore “
Richdale Avenue,	“	School “
Sycamore Street,	“	Highland Avenue.
“	“	“ Medford Street.
Thurston	“	“ South side Medford Street.
Wesley Park	“	“ Bow Street.
Willoughby Street,	“	Central Street.
“	“	“ Sycamore Street.

STREET SIGNS ERECTED.

Bonair Street	1	Mystic Avenue	3
Bond “	1	Oxford Street	1
Broadway	2	Pearl “	1
Church Street	1	Quincy “	1
Craigie “	1	School “	1
Cross “	1	Thurston “	1
Middlesex Avenue	1	Tufts “	1

EDGESTONES AND PAVINGS.

Lineal feet of edgestones set (including 1,210 feet reset), 9,600 ; square yards of brick paving laid (including 1,180 yards relaid), 3,500 ; square yards of stone paving laid (including 585 yards relaid), 3,400.

For the committee,

IRVING L. RUSSELL, *Chairman.*
GEO. I. VINCENT, *Clerk.*

REPORT

OF THE

COMMITTEE ON SEWERS.

CITY OF SOMERVILLE.

IN BOARD OF ALDERMEN, Jan. 1, 1887.

Accepted, and referred to the next city council, to be printed in the annual reports. Sent down for concurrence.

GEO. I. VINCENT, *Clerk pro tem.*

IN COMMON COUNCIL, Jan. 1, 1887.

Concurred in.

DOUGLAS FRAZAR, *Clerk.*

CITY OF SOMERVILLE.

IN COMMITTEE ON SEWERS, Dec. 31, 1886.

To the Board of Aldermen of Somerville:

The following is respectfully submitted as the final report of this committee for the year ending this day:—

SEWERS ACCOUNT.

CREDIT.

Appropriation	\$8,000 00
Receipts and credits:—	
For catch-basin curbs in sidewalks, — received credit from Sidewalks account	\$17 95
fees for entering Elm Street sewer	64 00
fee for drainage of Asylum buildings into Fitchburg Street sewer	50 00
labor and materials furnished in 1885, the bill for which remained uncol- lected Jan. 1, 1886	10 68
	<hr/>
	142 63
Value of materials on hand Jan. 1, 1886	241 38
Value of tools and property, Jan. 1, 1886	290 15
	<hr/>
Total credit	\$8,674 16

DEBIT.

Expenditures : —

For sixteen sewers, as per accom-

panying table	\$11,597 11
less assessments	8,736 07
	<hr/>
cost to city	\$2,861 04
nine catch-basins (average \$65.85 $\frac{1}{3}$)	592 68
five ninths cost of removing deposit from mouth of Bridge Street sewer	1,402 39
repairing sewers and drains	24 55
flushing sewers and filling catch-basins with water	300 94
cleaning sewers	140 88
examining sewers	36 50
repairing catch-basins	146 02
changing lines and grades of catch-basins	41 78
cleaning catch-basins	905 33
clearing mouth of catch-basins	145 37
examining catch-basins	2 62
changing lines and grades of man-holes	107 10
cleaning ditches	28 88
inspecting sewers built by abutters in Richdale Avenue, Essex, Preston, Dartmouth Streets, Eastman Place, Stickney, Chandler, Eglan- tine, Runey and Virginia Streets	223 75
books, stationery, and printing	3 40
repairing tools and property	48 53
sundry small expenses	50 23
arranging tools and property	3 32
cleaning man-holes	3 00
one half cost of private drain School and Medford Streets, because of improper location of water main in Medford Street	40 00
balance due contractors on sewers laid in 1885	390 56
private work, the bills for which remain uncol- lected	33 42
	<hr/>
<i>Amount carried forward</i>	<i>\$7,532 29</i>

<i>Amount brought forward</i>	\$7,532 29
Depreciation in value of materials	33 56
“ “ “ “ tools and property	76 26
Value of materials on hand, Dec. 31, 1886	275 74
Value of tools and property on hand, Dec. 31, 1886 (including purchases during the year, \$57.45)	246 80
	<hr/>
Total debit	\$8,164 65
	<hr/>
Balance unexpended	\$509 51
	<hr/> <hr/>

Work has also been done, for which credit or payment has been received, as follows:—

For the Board of Health, removing ashes	\$0 50
For private citizens	7 38
	<hr/>
Total	\$7 88

We have also sold old leather hose, and have credited tools and property account with the amount received by the treasurer for the same, which was \$24 54

The sewers built in Wilton, Lowell, Appleton, Lawrence, Hinckley, and Vernon Streets and Fiske Avenue, a total length of 4,564.2 feet, were designed and constructed for house drainage only, the topography of this section being such that the surface water is satisfactorily removed by means of a natural water-course.

These sewers empty into the Murdock Street sewer, through a siphon of eight-inch iron pipe laid under the Lowell Railroad.

Herewith is presented a list, made by the engineer, of sewers built during the year.

SEWERS BUILT IN 1886.

Street.	From	To	Length in Feet.	Total Cost.	Assess- ment.	Cost to City.
Brad'd Av.	School St. . .	Southeasterly . .	149.0	\$177 97	\$122 00	\$55 97
Cross . . .	Oliver St. . .	Flint St.	221.0	425 99	239 85	186 14
Dover . . .	End old sewer,	Orchard St. . . .	44.5 }	234 10	227 92	6 18
Orchard . .	Dover St. . . .	Near Meacham St .	218.5 }	436 05	413 49	22 56
Fisk Ave. .	Hinckley St. .	" Lowell St. . . .	463.7 }	205 98	157 05	48 93
Flint . . .	End old sewer,	Glen St.	127.0 }	573 11	414 47	159 04
Glen . . .	Flint St. . . .	Northeasterly . .	114.0 }	360 37	322 46	37 91
Howe . . .	Marshall St. .	Near School St. .	321.5 }	324 15	306 62	17 53
Kingman Ct	Wash'ton St. .	Fitchburg R. R. .	349.0 }	1,467 50	1,197 59	269 91
Lowell . .	Appleton St. .	Medford St. . . .	392.5 }	323.4 }		
" . . .	Wilton St. . .	Vernon St.	323.4 }	352 18	345 02	7 16
Vernon . .	Lowell St. . .	Jenny Lind Ave. .	619 1 }	849 23	451 36	397 87
" . . .	Jenny Lind av.	Southeasterly . .	348.5 }			
Orchard . .	Russell St. . .	Near Chester St. .	407.0 }			
Pembroke .	Central St. . .	" Sycamore St.,	354.5 }			
Priv. Lands	Murdock St. .	Lawrence St. . . .	436.5 }			
Wilton . .	Lawrence St. .	Lowell St.	508 6 }			
Lowell . .	Wilton St. . .	Appleton St. . . .	435.6 }	3,496 23	2,139 91	1,356 32
Appleton .	Lowell St. . .	Lawrence St. . . .	499.3 }			
Lawrence .	Appleton St .	Hinckley St. . . .	218.0 }			
Hinckley .	Lawrence St. .	Fisk Ave.	93.7 }			
" . . .	Fisk Ave. . . .	Near Broadway . .	225.3 }			
Summer . .	School St. . .	Laurel St.	985.5 }	1,658 01	1,377 12	280 89
Thurston .	Evergreen Av.,	Near Broadway . .	521.0 }	560 83	552 02	8 81
Tufts . . .	Glen St. . . .	Northwesterly . .	199.0 }	227 81	224 00	3 81
Tyler . . .	Vine St. . . .	Tower Ct.	158.0 }	247 20	245 19	2 01
Tower Ct..	Tyler St. . . .	Northeasterly . .	165.7 }			
Total . . .			8,899.4	\$11,597 11	\$8,736 07	\$2,861 04

For the committee,

DANIEL C. STILLSON, *Chairman.*

GEO. I. VINCENT, *Clerk.*

REPORT
OF THE
CITY ENGINEER.

CITY OF SOMERVILLE.

IN BOARD OF ALDERMEN, Jan. 26, 1887.

Referred to the committee on printing, to be printed in the annual reports. Sent down for concurrence.

GEO. I. VINCENT, *Clerk pro tem.*

IN COMMON COUNCIL, Jan. 27, 1887.

Concurred in.

DOUGLAS FRAZAR, *Clerk.*

CITY OF SOMERVILLE.

CITY ENGINEER'S OFFICE, Jan. 24, 1887.

To his Honor the Mayor and City Council:

GENTLEMEN, — In accordance with the provision of the city ordinances in relation to city engineering, I herewith submit my annual report for the year 1886.

SEWERS.

Eight thousand eight hundred and ninety-nine and four tenths feet of public sewers were built during the year, of which 985.5 feet were of brick, and 8,899.4 feet of pipe. In these sewers were built thirty-two man-holes.

Four thousand one hundred and sixty feet of pipe sewers have been built by private parties, under the direction of an inspector from this office.

The following table will show the size, length, cost, assessment, etc., of each sewer: —

TABULAR STATEMENT OF SEWERS BUILT IN 1886.

Name of Street.	LOCATION.		CONSTRUCTION.								COST.			
	From	To	Built by	Materials.	Size in inches.	Man-holes.	Inlets.	Length in feet.	Average Cut.	Av. cost per foot.	Total Cost.	Assessment.	Cost to City.	
Aldrich,	Pearl St.,	Roney St.,	Maurice Buttimer,	Akron pipe,	12	1	6	302.4	6.6	*	\$177 97	.....	.....
Bradford Av.,	School St.,	Southcasterly,	Stephen Buttimer,	"	10	1	4	149.0	9.8	\$1 19	\$122 00	.....	\$55 97
Chandler,	end of old sewer,	near Broadway,	Chas. A. Mongan,	"	8	..	18	437.0	6.0	*	.....	.....	.....
Cross,	Oliver St.,	Flint St.,	Stephen Buttimer,	"	12	1	11	221.0	9.7	1 93	425 99	.....	186 14
Dartmouth,	near Medford St.,	Northcasterly,	Day labor,	"	10	..	10	215.0	.....	*	.....	.....	.....
"	near Evergreen Av.	Southwesterly,	Linehan & O'Brien,	"	10	..	6	142.8	8.9	*	.....	.....	.....
Dover,	end of old sewer,	Orchard St.,	Chas. A. Mongan,	"	12	1	1	44.5	.....	0 89	234 10	.....	.....
Orchard,	Dover St.,	near Mcacham St.	"	"	12	..	12	218.5	{ 8.0	*	.....	.....	6 18
Eastman Pl.,	Highland Av.,	Southwesterly,	Paul Kelly,	"	8	..	2	190.5	6.7	*	.....	.....	.....
Essex,	Medford St.,	Richdale Av.,	"	"	12	..	12	247.0	7.0	*	.....	.....	.....
Fisk Av.,	Hinckley St.,	Glen St.,	Maurice Buttimer,	Portland pipe,	8	3	34	463.7	8.3	0 94	436 05	.....	22 56
Flint.	end of old sewer,	Lowell St.	"	Akron pipe,	12	..	4	127.0	.....	*	.....	.....	.....
Glen,	Flint St.,	Northcasterly,	"	"	10	..	5	114.0	{ 4.7	0 85	205 98	.....	48 93
Howe,	Marshall St.,	near School St.,	Richard Falvey,	"	12	2	22	321.5	7.8	1 78	573 51	.....	159 04
Kingman Ct.	Washington St.,	Fitchburg R. R.,	Chas. A. Mongan,	"	12	1	23	349.0	7.2	1 03	360 37	.....	322 46
Lowell,	Appleton St.,	Medford St.,	Dennis Ryan,	Portland pipe,	8	1	22	392.5	8.0	0 83	324 15	.....	306 62
"	Wilton St.,	Vernon St.,	"	"	10	1	14	323.4	.....	*	.....	.....	.....
Vernon,	Lowell St.,	Jenny Lind Av.,	"	"	10	3	34	619.1	{ 8.7	1 14	1,467 50	.....	269 91
"	Jenny Lind Av.,	Southcasterly,	"	"	8	1	19	348.5	.....	*	.....	.....	.....
Orchard,	Russell St.,	near Chester St.,	Paul Kelly,	Akron pipe,	12	1	23	407.0	6.6	0 87	352 18	.....	7 16
Pembroke,	Central St.,	near Sycamore St.,	Chas. A. Mongan,	"	12	1	17	354.5	7.2	2 40	849 23	.....	397 87
Private lands,	School St.,	near Summer St.,	"	"	10 & 8	..	10	715.5	8.0	*	.....	.....	.....
B. & L. R. L. Loc-	Murdook St.,	Lawrence St.,	Maurice Terry,	Portland pipe,	12	2	7	346.4	.....	*	.....	.....	.....
ocation,	McCarty's land,	Vinal's land,	Day labor,	Cast iron pipe,	8	..	..	90.1	{ 1.01	1 45	3,493 23	.....	1,356 32
Wilton,	Lawrence St.,	Lowell St.,	Maurice Terry,	Portland pipe,	12	2	10	508.6	.....	*	.....	.....	.....
Lowell,	Wilton St.,	Appleton St.,	"	"	10	1	24	435.6	.....	*	.....	.....	.....
Appleton,	Lowell St.,	Lawrence St.,	"	"	10	1	28	499.3	.....	*	.....	.....	.....
Lawrence,	Appleton St.,	Hinckley St.,	"	"	10	..	11	218.0	.....	*	.....	.....	.....
Hinckley,	Lawrence St.,	Fisk Av.,	"	"	10	..	5	93.7	.....	*	.....	.....	.....
"	Fisk Av.,	near Broadway,	"	"	8	..	12	225.3	.....	*	.....	.....	.....

Richdale Av.,	Essex St.,	Thurston St.,	Paul Kelly,	10 & 8	226.5	6.3	*	.....	.....	.....
"	"	near School St.,	Stephen Buttiner,	10 & 8	254.5	3.1	*	.....	.....	.....
Runeey,	Aldrich St.,	Cross St.,	"	11	670.6	3.8	*	.....	.....	.....
Stiekney,	Marshall St.,	near School St.,	Maurice Buttner,	12	364.5	3.5	*	.....	.....	.....
Summer,	School St.,	Laurel St.,	"	17 X 24	985.5	8.5	1 08	1,638 01	1,377 12	250 89
Thurston,	Evergreen Av.,	near Broad way,	Chas. A. Mongan,	3 55	521.0	8.4	1 08	569 83	552 02	8 81
Tufts,	Glen St.,	Northwesterly,	Stephen Buttiner,	12	190.0	10.9	1 14	227 81	224 00	3 81
Tyler,	Vine St.,	Tower Ct.,	"	12	158.0	5.3	0 76	247 20	245 19	2 01
Tower Ct.,	Tyler St.,	Northeasterly,	"	10	165.7	4.5	*	.....	.....	.....
Virginia,	Aldrich S ,	Jasper St.	Maurice Buttiner,	10	393.7			.....	.....	.....
	Total length of	sewers built by city	.....		8899.4			\$11,597 11	\$8,736 07	\$2,861 04
	"	" " " pri	vate parties		4160.0					

1 25.7 cubic yards of rock.

0 31 cubic yards of rock.

Total length of sewers built by city previous to Jan. 1, 1886

" " " " during the year 1886

" " " " public sewers built in city Jan. 1, 1887

4 171.7 cubic yards of rock.

5 29.5 cubic yards of rock.

198,941.8 feet.

8,899.4 "

207,841.2 feet, or 39.4 miles.

SEWERS IN WILTON, LOWELL, VERNON, AND OTHER
STREETS.

The system of sewers built in Wilton, Lowell, Vernon, and other streets in the vicinity discharges into the Murdock Street sewer. The crossing of the Boston and Lowell Railroad is made with an eight-inch cast-iron siphon pipe, ninety and one tenth feet in length.

The length of the system built is 4,564.2 feet, and the total cost was \$5,723.93, of which \$4,057.61 was assessed on the abutting estates.

The sewer in Vernon Street was connected with the private sewers in Jenny Lind and Partridge Avenues, which formerly discharged into the ditch on the northerly side of the Boston and Lowell Railroad, thereby diverting the sewage from the ditch, the pollution of which has been the cause of a serious nuisance to the residents in the vicinity.

CRAIGIE BRIDGE OUTLET.

The city of Cambridge — this city refusing to join them — cleaned and dredged at the sewer outlet under Craigie Bridge, and this city paid five ninths of the cost, which amounted to \$1,402.37. The amount of deposit removed was 6,150 cuoic yards.

MAN-HOLES.

There are several miles of sewers in which there are no man-holes, and therefore no opportunity to examine or flush them. I would therefore renew a former recommendation that a sufficient number of man-holes be built on these sewers as will give proper means for inspection and cleaning.

CATCH-BASINS.

Nine catch-basins were built at an average cost of \$65.85. The cost of cleaning catch-basins was \$905.33.

PRIVATE DRAINS.

Three hundred and twenty permits were issued for laying private drains, three hundred for new connections, and twenty for repairs. The drains have been located and properly recorded.

The Board of Aldermen licensed four persons as drain layers, and revoked one license. The present number of licensed drain layers is twenty-nine.

I would respectfully recommend that an inspector be employed, to be present when the drains are connected with the sewers, and to supervise the laying of all house drains.

STREETS.

The following table will show the streets accepted by the city council during the year :--

STREETS ACCEPTED IN 1886.

Name of Street.	From	To	Width in feet.	Length in feet.
Berkeley . . .	School Street	Central Street	40	1,361.8
Dartmouth . . .	Medford Street	Evergreen Avenue	40	737.0
Grove	Elm Street	Middlesex Central Railroad .	40	585.0
Irving	Holland Street	Broadway	40	1,175.0
Preston	School Street	Summer Street	40	839.1

STREET NUMBERING.

Five streets were numbered, and the owners of buildings notified. Many new buildings on streets already numbered were located on the numbering plans, and the owners of the buildings notified.

SURVEY OF THE CITY.

No special appropriation was made for this work, but the appropriation for salaries was two hundred dollars more than in 1885. Surveys were completed on Linwood Street, also on Dane Street and vicinity, Hinckley Street and vicinity. and a large number of new buildings located to complete the old work. We now have seventeen sheets (size 23 x 31), all of which are made on tracing cloth, and can be reproduced by the "blue process."

SIDEWALKS.

The following table will show the sidewalk improvements during the year:—

Street.	Side.	From	To	Materials.	Approx. length of walk, in feet.	Cost.
Broadway	Northeast.	North Street	Northwesterly	Bricks and edgestones .	116	\$194 60
Dartmouth	West	Evergreen Avenue	Broadway	Gravel and edgestones .	710	491 40
Davis Square	South	Elm Street	Highland Avenue	Bricks and edgestones .	250	332 01
Dover	Northwest,	Davis Square	Cambridge Line	" "	980	1,116 74
Elm	East	Morrison Street	Southerly	Bricks	78	74 22
Gilman	Both	End of old sidewalk,	Northwesterly	" and edgestones .	340	464 50
Medford	East	Somerville Avenue	Near Washington St.	Gravel " "	960	579 46
Morrison	Both	Elm Street	Grove Street	" " "	1,090	629 57
"	South	" "	" "	Bricks	530	301 72
North	Northwest,	Broadway	Northeasterly	" and edgestones .	115	140 50
Park Avenue	Both	Wallace Street	Elm Street	Gravel " "	950	517 18
Shawmut	East	Washington Street	Cross Street	" " "	580	422 56
Spring	West	Somerville Avenue	Pitman Street	" " "	170	118 66
Summit Ave.	North	Walnut Street	Vinal Avenue	" " "	530	400 83
"	South	" "	" "	Bricks " "	530	804 30
Tufts	Northeast.	Cross Street	Washington Street	Gravel " "	1,000	608 39
Totals					8,929	\$7,196 64

The Board of Aldermen assessed one half the cost on the abutters.

EXPENSES.

The expenses of the department for the year 1886 were as follows : —

Salary of city engineer, including the maintenance of a team	\$2,000 00
Salaries of assistants	1,657 40
Repairing instruments, stationery, spikes, tools, fares, etc	107 78
	<hr/>
Total expense of department	\$3,765 18

Respectfully submitted,

GEORGE A. KIMBALL,

City Engineer.

REPORT

OF THE

COMMITTEE ON FIRE DEPARTMENT.

CITY OF SOMERVILLE.

IN BOARD OF ALDERMEN, Jan. 1, 1887.

Accepted and referred to the next city council, to be printed in the annual reports. Sent down for concurrence.

GEO. I. VINCENT, *Clerk pro tem.*

IN COMMON COUNCIL, Jan. 1, 1887.

Concurred in.

DOUGLAS FRAZAR, *Clerk.*

CITY OF SOMERVILLE.

IN COMMITTEE ON FIRE DEPARTMENT,
Jan. 1, 1887.

To the City Council of Somerville :

The following is the final report of this committee for the year 1886 : —

We present herewith the annual report of the chief engineer of the Fire Department for the year just closed, and recommend that it be printed with the other reports.

We most heartily indorse the chief's recommendation that a chemical engine be procured. It would be especially valuable in the winter season, when the travelling is bad, and the steamer, owing to its weight, cannot be moved rapidly. A single engine is not, in our opinion, sufficient protection for a city so large and with so much high land.

We also hope that the number of new hydrants provided will in some degree keep pace with the increase of buildings, as they not only save hose, but by making short lines of hose sufficient to reach a fire, add greatly to the efficiency of the streams.

The number of men and the equipment of the department remain the same as last year.

The following is a statement of the receipts and expenses for the year ending Dec. 31, 1886 : —

FIRE DEPARTMENT ACCOUNT.

CREDIT.

Appropriation	\$24,000 00
Receipts and credits : —	
For articles sold	89 50
Total credit (<i>amount carried forward</i>)	<u>\$24,089 50</u>

Amount brought forward \$24,089 50

DEBIT.

Expenses :—

For salaries of permanent men	\$9,780 00
“ “ call-men	4,869 16
substitute drivers	352 15
improvements and repairs of apparatus and vehicles	331 67
new vehicles	50 00
improvements and repairs of buildings and furniture, and new furniture	901 64
maintenance and extension of fire-alarm telegraph, including alarm striker and setting same in tower on the city's land, Somerville Avenue, and three new boxes	1,228 13
hose and hose pipes, and repairing same,	64 05
new horses	1,000 00
grain and feed	528 07
horse-shoeing	213 32
harnesses, and repairing same	184 80
horse medicine and doctoring	91 20
hay and straw	905 79
fuel	423 16
supplies	190 15
water for hydrants and department buildings	1,835 82
gas	299 20
ice	41 00
insurance	123 75
washing and ironing	133 25
maintenance of reservoir	2 74
incidentals	455 18
maintenance of hand fire-extinguishers,	52 80

Total debit 24,057 03

Balance unexpended \$32 47

For the committee,

ALBERT M. ROBINSON, *Chairman.*
GEO. I. VINCENT, *Clerk.*

REPORT

OF THE

CHIEF ENGINEER OF FIRE DEPARTMENT.

CITY OF SOMERVILLE.

IN BOARD OF ALDERMEN, Jan. 1, 1887.

Referred to the next city council, to be printed in the annual reports.
Sent down for concurrence.

GEO. I. VINCENT, *Clerk pro tem.*

IN COMMON COUNCIL, Jan. 1, 1887.

Concurred in.

DOUGLAS FRAZAR, *Clerk.*

CITY OF SOMERVILLE.

SOMERVILLE, MASS., Dec. 31, 1886.

To the Committee on Fire Department:

GENTLEMEN, — Agreeable to custom, I herewith present to you a report of the operations of the Fire Department for the year 1886, a statement of the apparatus and its condition, and recommendations for increasing the public safety.

The number of fire alarms during the year was	34
The loss on property by fire was	\$5,528 00
Insurance on the same	15,800 00

The causes of alarms were as follows:—

Breaking of a kerosene lamp	2
Hot ashes in wooden receptacle	2
Greasy rag near stove	1
Smoke from building mistaken for fire	2
Incendiary	4
Explosion of oil stove	1
Wooden beam projecting into smoke flue	1
Boiling tar on cook stove	1
Children playing with matches	1
Thawing out water-pipe	1
Stroke of lightning	1
Fumigating hen-house	1
Sparks from locomotive engine	2
Fire-crackers on roof	5
Breaking of lantern	1
Sparks on roof from chimney	1
Ignition of painter's rags	1
Drying plastering	2
Fires in Cambridge	2
Unknown	2
Total alarms	34

MANUAL FORCE.

The manual force of the department consists of—

One steam fire-engine company of twelve men	12
Four hose companies of eight men each	32
One hook and ladder company of fifteen men	15
One assistant engineer	1
One chief engineer	1
	61

APPARATUS.

The fire apparatus in service consists of one steam fire-engine and hose tender; one hook and ladder carriage; four hose carriages, and 7,750 feet of hose.

There is in reserve one steam fire-engine, one hook and ladder carriage, and one horse hose carriage, either of which can be put in service in case of accident to the regular apparatus.

BUILDINGS.

The several buildings of the department are in good condition. The steamer house is so narrow that there is not sufficient room for quick work in hitching up; if it were made wider, it would not only be more convenient for the apparatus now there, but would also furnish excellent accommodations for a chemical engine. The location is central, the need of such an engine is universally admitted, and it seems as though it would be in the interest of economy to purchase one. This with the proposed tanks on Hose Four would furnish excellent apparatus for extinguishing dwelling-house fires.

FIRE HAZARD.

Within two years, large areas of pasture land have been sold in small lots, and hundreds of buildings, in close proximity to one another, have been erected thereon. The high lands of our city are such desirable locations for residences that the owners have been prompted to erect buildings on land formerly used for raising fruit and flowers. In short, many sections of our city which but

recently were sparsely settled are now compactly built, and our liability to have a large fire is greater than at any former time.

The water pressure on the elevated sections is not of sufficient force to throw effective fire streams, and the property situated thereon is dependent for protection on one steam fire-engine. I think the time has come for the city to provide some additional extinguishing apparatus to co-operate with the steamer in places where the gravity pressure of water fails us.

FIRE-ALARM TELEGRAPH.

This valuable auxiliary of the department is in excellent order. There is no other apparatus connected with the service that requires such constant vigilance as the fire-alarm telegraph. Notwithstanding the multiplicity of telephone wires, frequently causing interference with the wires of this system, and its exposure to storms, interruptions in its workings have been promptly remedied and the lines restored to their normal condition. I still believe that the three circuits should be divided into eight; then, if a circuit is broken, only a small section of the city is without the alarm, and the close proximity of another circuit would furnish the means whereby an alarm could be given.

The alarm consists of thirty miles of wire, seventeen gongs, six tower-bell strikers, and thirty-nine fire-alarm boxes. Three of the latter were put in service this year, namely, Nos. 33, 217, and 225. The alarm is run by a Hill battery of 212 cups. More alarm boxes are necessary, and one should be put in as soon as possible in the vicinity of Cottage Avenue and Chester Street.

As an additional means whereby information can be given the firemen of the existence of a fire, I recommend that the telephones at the fire stations be connected with the central office.

HYDRANTS.

Sixteen new hydrants have been set during the year, and others have been promised, but I have not learned that they have been put in.

I am pleased with the number of hydrants put in this year, and hope we shall be furnished with an equal number next year.

Hydrants at frequent intervals lessen the length of hose line

required to reach the fire, thus reducing the amount of friction, and thereby furnishing more effective fire streams. The total number of hydrants is now 310.

I desire to express my heartfelt thanks to his Honor the Mayor, and to the chairman and each member of the committee on fire department, for the kind interest shown towards the department, and their hearty co-operation in all matters appertaining to its welfare.

Respectfully submitted,

JAMES R. HOPKINS,

Chief of Fire Department.

REPORT
OF THE
COMMITTEE ON PUBLIC PROPERTY.

CITY OF SOMERVILLE.

IN BOARD OF ALDERMEN, Jan. 1, 1887.

Accepted and referred to the next city council, to be printed in the annual reports. Sent down for concurrence.

GEO. I. VINCENT, *Clerk pro tem.*

IN COMMON COUNCIL, Jan. 1, 1887.

Concurred in.

DOUGLAS FRAZAR, *Clerk.*

CITY OF SOMERVILLE.

IN COMMITTEE ON PUBLIC PROPERTY, Jan. 1, 1887.

To the City Council of Somerville:

The committee on public property submits the following final report for the year ending Dec. 31, 1886:—

POLICE STATION INCIDENTALS ACCOUNT.

CREDIT.

Appropriation	\$1,500 00	
Transfer from Interest account	300 00	
Receipts for rent of halls	418 33	
	<hr/>	
Total credit		\$2,218 33

DEBIT.

Expenditures:—		
For janitor's salary	\$750 00	
janitor's substitute in vacation	14 00	
gas	229 02	
gasolene	76 91	
water	25 26	
fuel	418 64	
insurance	20 00	
moving safe from City Hall	70 00	
repairs and improvements of building and furniture	323 71	
incidentals	22 97	
	<hr/>	
Total debit		1,950 51
		<hr/>
Balance unexpended		\$267 82
		<hr/> <hr/>

SCHOOLHOUSE INCIDENTALS ACCOUNT.

CREDIT.	
Appropriation	\$8,000 00
Transfer from interest account	705 92
	<hr/>
Total credit	\$8,705 92
DEBIT.	
Expenditures : —	
For repairs	\$3,307 37
improvements	2,861 22
furniture	191 82
rent	297 89
insurance	1,426 95
emptying privy vaults	76 00
sewer assessments	154 67
highway betterment assessment	385 00
carriage hire	5 00
	<hr/>
Total debit	\$8,705 92

The expenditures at the different schoolhouses were as follows : —

<i>Beach Street.</i>	
Repairs	\$76 11
Emptying privy vault	24 00
	<hr/>
	\$100 11
<i>L. V. Bell.</i>	
Repairs	\$397 56
Improvements : —	
Transoms over doors	150 00
Steam heating apparatus :	
contract and extras	\$2,395 35
plans	40 00
mason and carpenter work	45 00
	<hr/>
	\$2,480 35
less for iron of old fur- naces, sold	26 57
	<hr/>
	2,453 78
Furniture	34 10
	<hr/>
	3,035 44
<i>Amount carried forward</i>	<hr/> \$3,135 55

REPORT OF COMMITTEE ON PUBLIC PROPERTY. 273

Amount brought forward \$3,135 55

Bennett.

Repairs	\$48 26	
Insurance	18 00	
	<hr/>	66 26

Bingham.

Insurance	\$85 00	
Sewer assessment	98 67	
	<hr/>	183 67

Brastow.

Repairs	\$72 65	
Insurance	78 75	
Emptying privy vault	8 00	
	<hr/>	159 40

Burns.

Insurance		85 00
---------------------	--	-------

Cedar Street.

Repairs	\$68 56	
Insurance	24 00	
Emptying privy vault	12 00	
	<hr/>	104 56

Clarendon Block.

Rent	\$297 89	
Repairs	25 60	
	<hr/>	323 49

Cummings.

Repairs	\$17 53	
Furniture	6 00	
	<hr/>	23 53

Davis.

Repairs	\$86 34	
Sewer assessment	56 00	
	<hr/>	142 34

Edgerly.

Repairs		145 53
-------------------	--	--------

Amount carried forward \$4,369 33

<i>Amount brought forward</i>	.	.	.	.	\$4,369 33
<i>Forster.</i>					
Repairs . . . . .	.	.	.	.	\$100 17
Furniture . . . . .	.	.	.	.	34 40
Insurance . . . . .	.	.	.	.	20 00
Evergreen Avenue betterment assessment . . . . .	.	.	.	.	385 00
					<hr/>
					539 57
<i>Franklin.</i>					
Repairs . . . . .	.	.	.	.	\$79 67
Improvements (drain for privy vaults) . . . . .	.	.	.	.	62 00
Furniture . . . . .	.	.	.	.	5 00
Insurance . . . . .	.	.	.	.	105 00
Emptying privy vault . . . . .	.	.	.	.	8 00
					<hr/>
					259 67
<i>Harvard.</i>					
Repairs . . . . .	.	.	.	.	\$34 06
Furniture . . . . .	.	.	.	.	6 00
Insurance . . . . .	.	.	.	.	30 00
					<hr/>
					70 06
<i>High.</i>					
Repairs (including new tin roof and other expenses caused by blowing off of old tinning, \$641.67) . . . . .	.	.	.	.	\$852 05
Improvements (curtain in hall) . . . . .	.	.	.	.	54 30
Furniture . . . . .	.	.	.	.	15 87
Insurance . . . . .	.	.	.	.	241 25
					<hr/>
					1,163 47
<i>Highland.</i>					
Repairs . . . . .	.	.	.	.	\$160 42
Improvements (covered way to water-closets, gas-piping, etc.) . . . . .	.	.	.	.	71 14
Furniture . . . . .	.	.	.	.	58 82
Insurance . . . . .	.	.	.	.	255 00
					<hr/>
					545 38
<i>Jackson.</i>					
Repairs . . . . .	.	.	.	.	\$61 50
Furniture . . . . .	.	.	.	.	11 41
Insurance . . . . .	.	.	.	.	99 00
					<hr/>
					171 91
<i>Amount carried forward</i>	.	.	.	.	<hr/>
					\$7,119 39

Amount brought forward \$7,119 39

Lincoln.

Repairs	\$69 30	
Improvements (new outside windows)	70 00	
Emptying privy vault	8 00	
	<hr/>	147 30

Morse.

Repairs	\$332 61	
Improvements (making new room in base- ment)	145 02	
Furniture	12 22	
	<hr/>	489 85

Prescott.

Repairs	\$104 67	
Insurance	196 95	
	<hr/>	301 62

Prospect Hill.

Repairs	\$231 72	
Furniture	3 00	
Insurance	84 00	
	<hr/>	318 72

Spring Hill.

Repairs		17 43
-------------------	--	-------

Union.

Repairs	\$92 69	
Furniture	5 00	
Insurance	11 25	
	<hr/>	108 94

Webster.

Repairs	\$87 92	
Insurance	93 75	
Emptying privy vaults	16 00	
	<hr/>	197 67

\$8,700 92

Carriage hire 5 00

\$8,705 92

SCHOOLHOUSE IN WARD THREE (BINGHAM SCHOOL)
ACCOUNT.

CREDIT.

Appropriation	\$8,500 00
-------------------------	------------

DEBIT.

Expenditures: —

For 20,896 square feet of land on

Lowell Street, at 9 cents	\$1,880 64
on account of contract	5,600 00
architect's services and plans (on ac- count)	320 00
water-service pipe	27 88
lumber and labor in locating cellar	3 22

Total debit	\$7,831 74
-----------------------	------------

Balance unexpended	<u>\$668 26</u>
------------------------------	-----------------

SCHOOLHOUSE IN WARD FOUR (BURNS SCHOOL) ACCOUNT.

CREDIT.

Appropriation	\$8,500 00
-------------------------	------------

DEBIT.

Expenditures: —

For 16,080 square feet of land, Cherry

Street, at 12 cents	\$1,929 60
on account of contract for building	5,400 00
on account architect's services and for plans and specifications	320 00
water service	29 00
lumber and labor in locating cellar	4 72

Total debit	\$7,683 32
-----------------------	------------

Balance unexpended	<u>\$816 68</u>
------------------------------	-----------------

PUBLIC LIBRARY BUILDING ACCOUNT.

CREDIT.

Appropriation (balance from year 1885) . . . \$311 55

DEBIT.

Expenditures: —

For granite steps and curbing . . . 258 75

Balance unexpended . . . \$52 80

EXPENDITURES BY THIS COMMITTEE FROM THE APPROPRIATION FOR MISCELLANEOUS ACCOUNT.

For City Hall expenses: —

gas . . . \$260 87

fuel . . . 243 76

water . . . 31 37

ice (for 1885) . . . 40 00

resetting bank curbing and discontin-
uing old driveway . . . 217 64

pay of assistant janitor . . . 180 00

repairs and furniture . . . 386 74

incidentals . . . 113 18

\$1,473 56

voting-list boards and ballot-boxes and teaming
same . . . 45 50

preparing rooms for caucuses and elections . . . 35 03

rent of rooms for caucuses and elections . . . 105 00

raising and lowering flag-staffs and repairing flags
and halliards . . . 44 69

rebuilding fence at cemetery . . . 46 00

ringing bells July 4 . . . 3 00

removing flag-staff in Union Square . . . 54 50

new flag-staff at police building . . . 295 00

platform at police building for Inauguration Day, . . . 20 10

tools for superintendent of public buildings . . . 1 96

salary of assistant janitor of Public Library . . . 180 00

\$2,304 34

SCHOOLHOUSE INCIDENTALS ACCOUNT.

The only improvement under this account involving any considerable expense was made at the Bell School. The castings of the furnaces were worn out and could not be replaced because the patterns had been destroyed, and as new apparatus of some kind had to be provided, it was deemed best, in so large a building, to put in steam. Accordingly, plans and specifications were obtained for heating the building by steam, and a contract was made, by authority of the city council, with A. B. Franklin, who was the lowest bidder, for the sum of \$2,383.79, which, with his bill for extras of \$11.56, and the cost of the plans and specifications, \$40, carpentering, \$34.50, and masonry, \$10.50, made the total outlay for this improvement \$2,480.35. The apparatus has thus far given excellent satisfaction, and we believe the money was well spent.

A violent storm in the month of March tore the tinning from the roof of the High Schoolhouse, and the weather was so severe and the position of the building is so exposed, that it could not be re-tinned at once; consequently, the roof had to be covered with canvas temporarily, and a large canvas tent was spread in the hall for the protection of the building. The re-tinning was done with wooden strips nailed through into every rafter, so that it seems impossible for the damage to be repeated. The total cost of repairing the damage, including the temporary use of canvas, was, as before stated, \$641.67.

NEW SCHOOLHOUSES.

Land has been bought on Lowell Street in Ward Three, and on Cherry Street in Ward Four, and two four-room brick schoolhouses have been partially constructed thereon. The one on Lowell Street has been partially slated, and the other is ready for slating.

Messrs. J. H. Coon & Co. are the contractors for both buildings, under one contract, for the sum of \$21,000; and Mr. George F. Loring is the architect. The contract does not include heating apparatus or furniture.

The building on Cherry Street has been named the Burns School, in honor of our present mayor; and the one on Lowell

Street has been named the Bingham School, in honor of Col. Norman W. Bingham, for many years a member of the school committee.

PUBLIC LIBRARY BUILDING.

The bill of Martin Mullen for granite curbing in front of the library grounds, and for two granite steps at the entrance to the building, amounting to \$291.25, which was left unpaid last year, has been settled for the sum of \$258.75, as appears in the foregoing statement of the account.

For the committee,

DANIEL C. STILLSON, *Chairman.*

GEO. I. VINCENT, *Clerk.*

REPORT

OF THE

COMMITTEE ON FUEL AND STREET LIGHTS.

CITY OF SOMERVILLE.

IN BOARD OF ALDERMEN, Jan. 1, 1887.

Accepted and referred to the next city council to be printed in the annual reports. Sent down for concurrence.

GEO. I. VINCENT, *Clerk pro tem.*

IN COMMON COUNCIL, Jan. 1, 1887.

Concurred in.

DOUGLAS FRAZAR, *Clerk.*

CITY OF SOMERVILLE.

IN COMMITTEE ON FUEL AND STREET LIGHTS, Jan. 1, 1887.

To the City Council of Somerville:

The committee on fuel and street lights submits the following final report for the year 1886 : —

SCHOOL FUEL ACCOUNT.

CREDIT.

Appropriation	\$5,200 00
-------------------------	------------

DEBIT.

Expenditures : —

For fuel to Beach Street School	\$71 46
Bell “	323 00
Bennett “	164 65
Brastow “	68 81
Cedar Street “	48 37
Clarendon Block “	43 41
Cummings “	49 80
Davis “	219 33
Edgerly “	682 42
Forster “	671 55
Franklin “	163 25
Harvard “	31 28
High “	493 96
Highland “	496 74
Jackson “	181 94
Lincoln “	236 63
Morse “	227 92
Prescott “	393 55
Prospect Hill “	161 51

<i>Amounts carried forward</i>	\$4,729 58	\$5,200 00
--	------------	------------

<i>Amounts brought forward</i>	.	.	\$4,729 58	\$5,200 00
For fuel to Spring Hill School	.	.	29 09	
Union	"	.	23 90	
Webster	"	.	146 37	
			<hr/>	
Total expenditure	.	.	.	4,928 94
				<hr/>
Balance unexpended	.	.	.	<u>\$271 06</u>

STREET LIGHTS ACCOUNT.

CREDIT.

Appropriation	.	.	.	.	.	\$9,500 00
Receipts :—						
For new street lamps erected, 17 at \$20,			\$340 00			
naphtha barrels sold	.	.	9 00			
repairs of street lamps damaged by						
teams	.	.	60 98			
			<hr/>			409 98
						<hr/>
Total credit	.	.	.	.	.	\$9,909 98

DEBIT.

Expenditures :—						
For gas, —						
to Charlestown Gas Com-						
pany	.	.	\$1,873 54			
to Cambridge Gas Light						
Company	.	.	2,339 03			
			<hr/>			\$4,212 57
lighting and care of lamps, —						
to Christopher Burke to						
May 1	.	.	723 06			
to sundry other persons						
to Dec. 31	.	.	1,456 46			
			<hr/>			2,179 52
new street lamps	.	.	1,004 88			
repairs of street lamps	.	.	559 91			
supplies (naphtha, alcohol, etc.)	.	.	402 16			
incidentals (advertising for proposals,						
etc.)	.	.	70 37			
			<hr/>			<hr/>
<i>Amounts carried forward</i>	.	.	\$8,429 41			\$9,909 98

<i>Amounts brought forward</i>	.	.	\$8,429 41	\$9,909 98
For street signs	.	.	31 50	
moving street lamps	.	.	23 48	
changing naphtha lamps to oil lamps	.	.	53 23	
posts and lanterns on hand (sixteen posts and thirty-six lanterns)	.	.	324 75	
			<hr/>	
Total expenditures	.	.	.	8,862 37
				<hr/>
Balance unexpended	.	-	.	\$1,047 61
				<hr/> <hr/>

FUEL.

The following are the prices paid for fuel:—

To George M. Winslow & Co., under contract for year ending July 1, 1886, \$4.45 per ton for furnace and egg coal, \$5.15 for stove coal; \$8.00 per cord for hard wood, and \$7.00 for soft wood; and to B. F. Wild & Co., under contract for year ending July 1, 1887, \$4.38 per ton for furnace and egg coal, \$4.80 per ton for stove coal; \$6.50 per cord for hard wood, and \$5.50 for soft wood.

STREET LIGHTS.

Christopher Burke's contract for lighting and cleaning the street lamps, both gas and oil, for a compensation of thirty-nine cents per month for each lamp, expired on the first day of May last; and since that date the work has been directly in charge of the superintendent of public buildings and lights under the supervision of this committee.

The committee, after careful consideration, established the prices to be paid for lighting and taking care of gas lamps at thirty-five cents per month each, and of oil lamps at fifty-five cents (it being understood that the average number of lightings per month should be about twenty-two), making the average price substantially the same as that paid Mr. Burke last year; and the superintendent was authorized to employ suitable parties to do the work. This change in the method of lighting has given good satisfaction to the committee, and, we have reason to believe, to the public as well.

A change was also made, about the last of October, in the fixtures used in the oil lamps. The naphtha fixtures had become so much worn that it did not pay to continue repairing them, and in view of the constant danger from explosion of the naphtha in the lamps, as well as of that on storage, and for other reasons, it

was deemed best to do away with these fixtures, and to substitute common kerosene oil lamps. They give as good a light as the naphtha fixtures, can be run as cheaply, and the first cost is less.

The committee on street lights of 1885 recommended, in their final report, that a few lights of greater brilliancy than those commonly used be placed in the public squares and thoroughfares; and, believing in the wisdom of this suggestion, we have erected three lamps with thirty-foot burners in Union Square, and have changed from four-foot to thirty-foot burners one lamp in Davis Square, one on Broadway at the corner of Franklin Street, and one on Broadway at the corner of Marshall Street.

The average time when the lights are extinguished is half past twelve.

The price paid for gas during the entire year has been \$1.65 per thousand feet, except in the thirty-foot lamps, for which the price is \$1.50 per thousand.

The price collected from abutters for each lamp erected has been continued at twenty dollars.

The following is a table of street lamps, showing the additions during the year:—

	GAS LAMPS.				Oil lamps.	Total.
	Charlestown Gas.		Cambridge Gas.			
	4 feet.	30 feet.	4 feet.	30 feet.		
Lamps in the city Jan. 1. 1886, as per last report	178	..	216	..	70	464
Deduct for correction in numbers of gas lamps	1	..	2	..	..	..
Erected during the year at expense of city	177	..	214	..	70	461
Erected during the year at expense of abutters . . . . .	..	..	4	3	9	16
Changed from oil to gas	9	..	4	..	4	17
Changed from oil to gas	186	..	222	3	83	494
Changed from oil to gas	1	..	1	..	2	..
Changed from 4-feet to 30-feet	187	..	223	3	81	494
Changed from 4-feet to 30-feet	2	2	1	1	..	..
	185	2	222	4	81	494

The lamps erected at the city's expense, except the 30-foot gas lamps hereinbefore enumerated, have been placed on main avenues, in front of city property and in front of large tracks of vacant land, as follows: —

Broadway at Alewife Brook.

- “ “ Willow Bridge, east side.
- “ “ “ “ west side.
- “ “ corner of Cedar Street at City Farm.
- “ “ Elm Street.
- “ “ Willow Avenue.
- “ in front of Lincoln School.

Medford Street, between Somerville Avenue and the Fitchburg Railroad.

Medford Street, between Walnut Street and Lowell Railroad.

Somerville Avenue, corner Church Street.

Walnut Street, at Lowell Railroad bridge.

Washington Street, between Prospect and Mystic Streets.

Washington Street, corner Franklin Street.

For the committee,

MOSES G. STEELE, *Chairman.*

GEO. I. VINCENT, *Clerk.*

REPORT
OF THE
CITY SOLICITOR.

CITY OF SOMERVILLE.

IN BOARD OF ALDERMEN, Feb. 23, 1887.

Referred to the committee on printing, to be printed in the annual reports. Sent down for concurrence.

CHARLES E. GILMAN, *Clerk.*

IN COMMON COUNCIL, Feb. 24, 1887.

Concurred in.

DOUGLAS FRAZAR, *Clerk.*

CITY OF SOMERVILLE.

SOMERVILLE, Feb. 14, 1887.

To the Honorable the Mayor and City Council of Somerville :

GENTLEMEN, — I beg leave to present the following as my eleventh annual report. Outside of advice during the year to departments and city officers, which of course year by year requires increased time and attention, there have been two matters to which I have given much labor. The first relates to the application which I was instructed by your honorable body to make to the General Court for a general act, providing in substance that cities and towns, whose sinking funds consisted wholly or in part of their own bonds or securities, might apply the same toward the payment of their funded debt, and be allowed a period not exceeding twenty years for the payment of the remainder. A hearing was had April 21, 1886, before the committee on cities, at which his Honor the Mayor and myself presented your views upon the matter. Some time afterwards the secretary of our sinking fund commissioners presented in writing to the committee his own and the objections of the commissioners to the proposed legislation. This communication naturally produced an unfavorable impression in the minds of some of the committee, and retarded their action upon the bill proposed. The outcome was a divided sentiment upon the expediency of any general legislation upon the subject, although the committee expressed themselves as unanimously in favor of reporting a special act for the city of Somerville, embodying all the provisions of the bill as presented. This the Mayor and I did not feel authorized or inclined to accept, as we did not desire to impair the first-class credit of the city by any adverse or unfriendly conclusions that might be drawn from the very fact of obtaining exceptional legislation.

Late in the session, the committee, by a divided vote, reported in favor of a general bill, or rather voted so to report; but as it was

then too late to expect a patient discussion of its merits in the General Court, it was considered best to let the matter pass until another year.

The second matter to which my attention was directed was the new water contract with the city of Boston, which, for reasons set forth in my last annual report, failed last year of execution. The efforts of our Water Board were renewed early this year, and were most persistently prosecuted, with the gratifying results with which you are all familiar.

During the year nine claims have been heard by the committee on claims. I have attended all the hearings, and from time to time have given the committee my opinion as to the proper disposition of these demands. The following summary will furnish you, I believe, all necessary information concerning the same: —

1. Claim of Susan McCauley, for injuries to her person, upon Somerville Avenue, Jan. 24, 1886. Suit was brought upon this claim, and Oct. 28, 1886, we were present to defend the case in the Superior Court at East Cambridge, but the plaintiff failed to appear, and the case was non-suited.

2. John A. Hart's claim for injuries upon Cutter Street, Feb. 8, 1886, was settled by the Mayor, upon my recommendation, for a small sum.

3 and 4. Claims of the East Cambridge Savings Bank and of Ellen Gibbons, for damages by alleged raising of grade of Linwood Street. The petitioners, for reasons that I need not take your time to explain, were, upon my recommendation, given leave to withdraw, and we have heard nothing from them since.

5. The claim of Eliza Young, for personal injuries upon Franklin Street, Jan. 8, 1886, has ripened into a suit in the Superior Court at Cambridge, which is now pending.

6. The claim of Casey and Kearney for injuries to a team, May 7, 1886, upon Maple Street, resulted in a committee report that no further action was necessary.

7. In the case of the claim of Leonard C. Seavey, for damage to horse and wagon by the alleged careless handling of a hydrant upon Broadway, June 14, 1886, the petitioner was given leave to withdraw.

8. Claim of Horatio Wellington & Co. for damage to horse, June 30, 1886, upon Emerson Street, was settled, upon my recommendation, by payment of the sum of thirty dollars.

9. In the case of B. F. Allen, claimant of compensation for use of his land at corner of Somerville Avenue and Medford Street, by the city as a dumping place, the committee reported no further action necessary.

I have tried or otherwise disposed of the following cases in court during the year: —

1. The application of Benjamin Hadley and others came up before the county commissioners of Middlesex County, March 16, 1886. The petitioners asked for a jury to assess their grade damages upon Linwood Street. The commissioners refused their request.

2. The case of George P. Deshon, for injuries received upon Day Street, was tried before a jury in the Superior Court at Cambridge, May 10, 1886, and resulted in a verdict of thirteen hundred dollars against the city.

3. The case of Col. C. G. Rowell, for injuries received upon Pearl Street, came up for trial before a jury in the Superior Court at Cambridge, June 14, 1886. The case was opened to the jury, and the jury viewed the driveway upon which the plaintiff fell, when the case was suspended in order to enable me to submit to the city council a proposition for settlement then made to me by plaintiff's counsel. This proposition was to settle for twelve hundred dollars; and the city council deemed it for the interests of the city to settle for that sum, which was accordingly done.

4. The case of Hannah E. Dodge, for injuries received upon Washington Street, was tried before a jury in the Superior Court at Cambridge, June 16 and 17, 1886, and resulted in a verdict of fifteen hundred dollars against the city.

5. The case of Susan McCauley, for injuries received upon Somerville Avenue, resulted favorably to the city, Oct. 28, 1886, in the manner I have already described in another place in this report.

6. The case of Frederic Ayer and others, trustees of the estate of the late Dr. J. C. Ayer, to quash the sewer assessments levied upon their land upon Morrison and Cedar Streets, was argued by me before the Supreme Court, Nov. 10 and 11, 1886, and has not as yet been decided by that tribunal.

The following cases, to which the city is a party, were pending at the close of the last municipal year: —

1. Mayor and Aldermen of Somerville *v.* Fitchburg Railroad

Company, before the county commissioners of Middlesex County. Petition for grade crossing of railroad location at Sacramento Street.

2. Parker *v.* Somerville, before Supreme Judicial Court in Middlesex County. Bill in equity to restrain nuisance alleged to be caused by the city upon Mystic Flats.

3. Parker *v.* Somerville, before county commissioners of Middlesex County. Damages for injury to real estate by nuisance growing out of sewage.

4. Squire *v.* Somerville, before Superior Court in Middlesex County. Damages for conversion of box-drain.

5. Mayor and Aldermen *v.* Boston and Lowell Railroad Company, before the county commissioners of Middlesex County. Petition for repairs in bridges across railroad location in Somerville.

6. The case of Frederick Ayer *et al.*, trustees, etc., petitioners for a writ of *certiorari* to quash sewer assessments on Morrison and Cedar Streets, already referred to.

7. Shea *v.* Somerville, before Superior Court in Middlesex County. Action for personal injuries upon Russell Street, Oct. 14, 1885.

8. Joslin *v.* Cole *et al.* Action for false arrest and imprisonment.

9. Mullin *v.* Somerville, before the Superior Court at Boston. An action of contract for extra stone work, etc., upon the Public Library grounds. This case will be settled as soon as an administrator is appointed, the plaintiff having died since the institution of the suit.

10. William H. Mahoney *v.* County Commissioners of Middlesex County. Petition for mandamus to compel the respondents to issue an order for a jury to revise the assessment of land damages by the Mayor and Aldermen of Somerville, upon the extension of Evergreen Avenue.

11. Rufus B. Stickney *v.* City of Somerville. Petition for a jury to revise betterment assessments upon forty lots of land for extension of Evergreen Avenue.

Respectfully submitted,

SAMUEL C. DARLING,

City Solicitor.

REPORT

OF THE

CITY CLERK.

CITY OF SOMERVILLE.

REPORT OF THE CITY CLERK.

Annual report of the receipts of his office for the year ending Dec. 31, 1886; also the registration of marriages, births, and deaths for the same period.

RECEIPTS FOR THE YEAR ENDING DEC. 31, 1886.

Recording mortgages and assignments	\$302 74
Fees for licensing dogs	190 60
11 auctioneers' licenses	22 00
34 junk licenses	68 00
321 marriage certificates	160 50
1 billiard table	4 00
12 liquor licenses	12 00
	<hr/>
	\$759 84

All of which has been paid to the city treasurer, and his receipt taken for the same.

MARRIAGES IN 1886.

Number of intentions issued in 1886	321
Increase over last year	30
Marriages registered in 1886	354

NATIONALITY OF THOSE REGISTERED.

Both parties American	185
“ “ foreign	94
American groom and foreign bride	42
Foreign groom and American bride	33
	<hr/>
	354 couples.

First marriage of	627	
Second	76	
Third	4	
Fourth	1	
	—	354 couples.
Oldest person married	67	
Youngest	17	

Youngest couple married: —

Bridegroom	19
Bride	18

BIRTHS.

Number of births registered in 1886	722	
Less than last year	20	
Males	352	
Females	370	
	—	722
Born of American parents	323	
“ “ foreign “	264	
American father and foreign mother	66	
Foreign father and American mother	69	
	—	722
Number of cases of twins	10	

DEATHS.

Whole number of deaths in Somerville in 1886	493	
Less than last year	55	
Number of males	228	
Number of females	265	
	—	493
Under 10 years of age	173	
Between 10 and 20	22	
“ 20 “ 30	56	
“ 30 “ 40	50	
“ 40 “ 50	32	
“ 50 “ 60	39	
“ 60 “ 70	46	
“ 70 “ 80	40	
“ 80 “ 90	30	
“ 90 “ 100	5	
	—	493

Oldest person deceased, 95 years, 11 months, 26 days.

NATIONALITY.

Born in Somerville	164	
“ “ other places in United States	219	
Foreign birth	110	
	—	493
Number of deaths returned by undertakers		493
January	27	
February	46	
March	38	
April	43	
May	47	
June	32	
July	47	
August	46	
September	43	
October	43	
November	38	
December	41	
	—	493

For classification of diseases, see report of Board of Health.

CHARLES E. GILMAN, *City Clerk.*

REPORT

OF THE

INSPECTOR OF MILK.

CITY OF SOMERVILLE.

IN BOARD OF ALDERMEN, Feb. 9, 1887.

Referred to the committee on printing, to be printed in the annual reports. Sent down for concurrence.

GEO. I. VINCENT, *Clerk pro tem.*

IN COMMON COUNCIL, Feb. 10, 1887.

Concurred in.

DOUGLAS FRAZAR, *Clerk.*

CITY OF SOMERVILLE.

SOMERVILLE, Jan. 31, 1887.

To his Honor the Mayor and Gentlemen of the City Council:

GENTLEMEN, — During the year ending Dec. 31, 1886, I have granted eighty-three *new*, and *renewed* one hundred forty-five milk licenses. I have also granted twenty-eight registers to parties who retail milk in stores. There are now one hundred and thirty-five registered places for retailing milk. I have taken and tested three hundred and forty-seven samples of milk, and have sent or carried forty-nine notices to persons where the samples did not come up to the full standard. In no case has it been necessary to institute a prosecution, as I have found it better to advise with the parties, and they have found it better to sell good milk. There have been but two complaints from individuals who *thought* they were receiving poor milk. In both cases the cream had been removed for breakfast coffee.

In almost every other case in which the milk was below the standard, it was because the milk in the top of the cans had been sold without properly mixing the milk; or, to be more accurate, it was sold before the cream was stirred in.

The milkmen licensed by me dispose of some six thousand cans of milk daily in Somerville and the adjoining cities; and I hear of but few prosecutions, and less convictions. Milk is now brought from a great distance, and the supply is generally bountiful and the quality *good*. Milk is distributed in our city directly from about seven hundred cows owned and milked by the sellers. I have also licensed twenty-one persons to deal in oleomargarine and butterine, but since the United States has taken up the license business, I think there are but few who now deal in the article; in fact, I have found but two stores where the article is kept

openly. I am free to say, that, in my opinion, the gentlemen engaged in the extensive business of the milk supply of our city and others, will compare very favorably for honesty, integrity, and fair dealing with any business class in our community.

THOMAS CUNNINGHAM,

Milk Inspector.

CITY GOVERNMENT AND OFFICERS FOR 1887.

MAYOR.

MARK F. BURNS.

Residence, 95 Perkins Street; office, City Hall.

ALDERMEN.

ELBRIDGE G. PARK, *President.*

WARD ONE.

ELDRIDGE G. PARK	.	.	.	.	.	Arlington Street.
NATHAN H. REED	.	.	.	.	.	Florence Street.

WARD TWO.

SAMUEL W. HOLT	.	.	.	.	.	Washington Street.
DANA W. BENNETT	.	.	.	.	.	Washington Street.

WARD THREE.

HARRISON ALDRICH	.	.	.	.	.	Gilman Street.
JOHN F. KENNARD	.	.	.	.	.	Howe Street.

WARD FOUR.

WALTER C. MENTZER	.	.	.	.	.	Cedar Street.
BERNARD W. LAWRENCE	.	.	.	.	.	Holland Street.

CLERK OF BOARD OF ALDERMEN.

CHARLES E. GILMAN.

COMMON COUNCIL.

CHARLES L. NORTH, *President.*

WARD ONE.

GEORGE D. WEMYSS	Austin Street.
GEORGE M. STARBIRD	Pearl Street.
CHARLES M. HEMENWAY	Perkins Street.
RICHARD DOWD	Charles Street.

WARD TWO.

CHARLES L. NORTH	High Street.
TIMOTHY C. DWYER	Somerville Avenue.
PATRICK F. DEADY	Oak Street.
JOHN W. MACDONALD	High Street.

WARD THREE.

EDWARD O'BRIEN	Lowell Street.
ROBERT DUDDY	Bond Street.
EZRA D. SOUTHER	Pembroke Street.
MARTIN L. KING	Cross Street.

WARD FOUR.

LOUIS E. MERRY	Dover Street.
EDWARD H. BRADSHAW	Cambria Street.
GEORGE O. PROCTOR	Spring Street.
D. WALLIS TUCKER	Elm Street.

CLERK OF COMMON COUNCIL.

DOUGLAS FRAZAR.

JOINT STANDING COMMITTEES FOR 1887.

ACCOUNTS. — Aldermen Aldrich, Mentzer; Councilmen King, Hemenway, Proctor.

CITY ENGINEERING. — Aldermen Holt, Bennett; Councilmen Merry, Starbird, King.

CLAIMS. — His Honor the Mayor; Alderman Holt; the President of the Common Council; Councilmen Hemenway, Merry.

FINANCE. — His Honor the Mayor; Aldermen Park, Bennett; the President of the Common Council; Councilmen Bradshaw, Wemyss, Souther, Deady.

FIRE DEPARTMENT. — Aldermen Lawrence, Kennard; Councilmen Wemyss, Tucker, Duddy.

FUEL AND STREET LIGHTS. — Aldermen Aldrich, Reed; Councilmen Dwyer, Proctor, King.

HIGHWAYS. — Aldermen Holt, Reed; Councilmen O'Brien, Bradshaw, Dwyer.

LEGISLATIVE MATTERS. — His Honor the Mayor; Alderman Mentzer; the President of the Common Council; Councilmen Starbird, Hemenway.

ORDINANCES. — Aldermen Bennett, Reed; Councilmen Souther, Tucker, Dowd.

PRINTING. — Aldermen Kennard, Lawrence; Councilmen Duddy, Deady, Wemyss.

PUBLIC GROUNDS. — Aldermen Reed, Kennard; Councilmen Merry, Souther, Macdonald.

PUBLIC PROPERTY. — Aldermen Park, Mentzer; Councilmen Duddy, Starbird, Macdonald.

SOLDIERS' RELIEF. — Aldermen Reed, Holt; Councilmen O'Brien, Merry, Dowd.

WATER. — Aldermen Mentzer, Kennard; the President of the Common Council; Councilmen O'Brien, Dowd.

COMMITTEES OF THE BOARD OF ALDERMEN.

STANDING COMMITTEES.

ELECTIONS. — Aldermen Park, Lawrence.

ENROLLED ORDINANCES. — Aldermen Aldrich, Park.

LICENSES. — Aldermen Lawrence, Holt.

POLICE. — His Honor the Mayor; Aldermen Aldrich, Mentzer.

SEWERS. — Aldermen Bennett, Aldrich, Lawrence.

STATE AID. — Aldermen Bennett, Park, Mentzer, Kennard.

SPECIAL COMMITTEE.

BUILDING PERMITS. — Aldermen Holt, Lawrence.

STANDING COMMITTEES OF THE COMMON COUNCIL.

ELECTIONS AND RETURNS. — Councilmen Tucker, Dowd, Macdonald.

ENROLLED ORDINANCES AND RESOLUTIONS. — Councilmen Souther, Deady, Proctor.

SCHOOL COMMITTEE.

MARK F. BURNS, Mayor, Chairman, *ex officio*.

CHARLES L. NORTH, President of the Common Council, *ex officio*.

(Term, three years.)

WARD ONE.

JOHN H. BUTLER (elected 1884)	.	.	Pearl Street.
S. NEWTON CUTLER (elected 1885)	.	.	Pearl Street.
HORACE C. WHITE, M. D. (elected 1886)	.	.	Arlington Street.

WARD TWO.

A. H. CARVILL, M. D. (elected 1885)	.	.	Bow Street.
JAMES F. BEARD (elected 1886)	.	.	Prospect Hill Av.
CHARLES I. SHEPARD (elected 1884)	.	.	High Street.

WARD THREE.

NORMAN W. BINGHAM (elected 1885)	.	.	School Street.
Q. E. DICKERMAN (elected 1886)	.	.	Central Street.
WILLIAM P. HILL (elected 1884)	.	.	Sycamore Street.

WARD FOUR.

MARTIN W. CARR (elected 1884)	.	.	Craigie Street.
Prof. BENJAMIN G. BROWN (elected 1885)	.	.	Professors' Row.
H. P. MAKECHNIE, M. D. (elected 1886)	.	.	Elm Street.

Superintendent and Secretary, J. H. DAVIS, Myrtle Street.

PRINCIPAL ASSESSORS.

(Term, three years.)

STILLMAN H. LIBBY (elected 1886), <i>Chairman</i> ,	Elm Street.
GEORGE W. HADLEY (elected 1885)	Perkins Street.
BENJAMIN F. THOMPSON (elected 1887)	Summit Avenue.

ASSISTANT ASSESSORS.

(Term, one year.)

GEORGE W. BARTLETT, Ward One . . .	Mt. Vernon Street.
WILLIAM A. FLAHERTY, Ward Two . . .	Washington Street.
HIRAM D. SMITH, Ward Three . . .	Cross Street.
SAMUEL T. RICHARDS, Ward Four . . .	Summer Street.

BOARD OF HEALTH.

(Term, Physician, three years; other members, two years.)

GEORGE A. KIMBALL (appointed 1887), <i>Chairman</i> .	Office, City Hall.
GEORGE C. SKILTON (appointed 1886) . . .	Walnut Street.
THOMAS M. DURELL, M. D. (appointed 1885) .	Bow Street.
<i>Clerk</i> , GEORGE I. VINCENT . . .	Office, City Hall.
<i>Inspector</i> , WILLIAM H. BRINE . . .	40 Houghton Street.

COMMISSIONERS OF THE SINKING FUNDS.

(Term, three years.)

NATHAN TUFTS (elected 1886) . . .	Summer Street.
HENRY F. WOODS (elected 1885) . . .	Sycamore Street.
EZRA D. CONANT (elected 1887) . . .	Pearl Street.

Treasurer, AARON SARGENT, Broadway.**OVERSEERS OF THE POOR.**MARK F. BURNS, *Mayor, Chairman, ex officio.*

HERBERT E. HILL (elected 1886 for 4 years) .	Mt. Vernon Street.
CHARLES S. LINCOLN (elected 1885 for 2	
years)	Laurel Street.
EDWARD GLINES (elected 1885 for 3 years) .	Highland Avenue.
CHARLES G. BRETT (elected 1885 for 4 years).	Hall Street.

Agent, CHARLES C. FOLSOM, Office, Police Building, Bow Street.*Secretary*, GEORGE T. LINCOLN, Office, Police Building, Bow Street.

REGISTRARS OF VOTERS:

CHARLES E. GILMAN, *City Clerk*.

CROMWELL G. ROWELL (appointed 1886 for unexpired term).

JOHN R. CONANT (appointed 1884 for 3 years).

SAMUEL G. A. TWYXCROSS (appointed 1886 for 3 years).

SOMERVILLE MYSTIC WATER BOARD.

(Term, one year.)

J. ORLIN HAYDEN, <i>President</i>	Hill Building, Union Square.
WALTER S. BARNES	Highland Avenue.
CHARLES H. BROWN	Sycamore Street.
JOHN B. VIALL	Webster Street.
RICHARD T. BLACKWELL	Somerville Avenue.

Superintendent of Water Works, NATHANIEL DENNETT.

Office, Prospect Street, corner Somerville Avenue.

TRUSTEES OF THE PUBLIC LIBRARY.

(Term, three years.)

CHARLES S. LINCOLN (elected 1885), <i>President</i> ,	Laurel Street.
CHARLES G. POPE (elected 1885)	Franklin Street.
J. HENRY FLITNER (elected 1886), <i>Secretary</i> ,	Day Street.
GEORGE A. BRUCE (elected 1886)	Highland Avenue.
WILLIAM E. WELD (elected 1887)	Harvard Street.
JAMES E. WHITAKER (elected 1887)	Sycamore Street.
WILLIAM H. BRINE (elected 1886)	Highland Avenue.
SANFORD HANSCOM, M. D. (elected 1887)	Webster Street.
CHRISTOPHER E. RYMES (elected 1885)	Summer Street.

Librarian, HARRIET A. ADAMS.

Assistant Librarian, LIZZIE A. STEVENS.

CITY CLERK AND CLERK OF BOARD OF ALDERMEN.

CHARLES E. GILMAN. Office, City Hall.

CITY TREASURER AND COLLECTOR OF TAXES.

JOHN F. COLE. Office, City Hall.

CITY MESSENGER.

JAIRUS MANN. Office, City Hall.

CITY SOLICITOR.

SAMUEL C. DARLING. Office, 18 Rogers Building, Boston.

CITY AUDITOR.

DOUGLAS FRAZAR. Office, City Hall.

CITY ENGINEER.

GEORGE A. KIMBALL. Office, City Hall.

SUPERINTENDENT OF STREETS.

FRANK G. WILLIAMS, Albion Street. Office, City Hall.

SUPERINTENDENT OF PUBLIC BUILDINGS AND LIGHTS

THOMAS R. ROULSTONE. Office, City Hall.

SUPERINTENDENT OF TELEGRAPH AND TELEPHONE LINES.

JAMES R. HOPKINS, Summit Avenue.

CHIEF OF POLICE.

MELVILLE C. PARKHURTT, Police Station, Bow Street.

CHIEF ENGINEER OF FIRE DEPARTMENT.

JAMES R. HOPKINS. Office, Engine House, Highland Avenue.

INSPECTOR OF BUILDINGS.

JAMES R. HOPKINS, Summit Avenue.

INSPECTOR OF MILK AND VINEGAR.

THOMAS CUNNINGHAM, Oak Street.

CITY PHYSICIAN.

THOMAS M. DURELL, M. D., 14 Bow Street.

CLERK OF ASSESSORS AND COMMITTEES.

GEORGE I. VINCENT. Office, City Hall.

ASSISTANT CLERK OF ASSESSORS AND COMMITTEES.

WILLIAM P. MITCHELL. Office, City Hall.

CONSTABLES.

JAIRUS MANN.

ROBERT R. PERRY.

CHARLES C. FOLSOM.

EDWARD MCGARR.

C. C. CAVANAGH.

WM. H. BRINE (Houghton St.).

WILLIAM D. HAYDEN.

SAMUEL R. DOW.

JOSEPH J. GILES.

GEORGE CULLIS.

FIELD DRIVERS.

JOHN E. FULLER.	DENNIS KELLY.
JUDSON W. OLIVER.	CHARLES S. THRASHER.
GEORGE H. CARLETON.	GEORGE W. BEAN.
PATRICK BENCH.	CHARLES L. ELLIS.
	JAMES F. FOLEY.

FENCE VIEWERS.

DAVID A. SANBORN.	CHARLES D. ELLIOTT.
-------------------	---------------------

POUND KEEPER.

CHARLES A. SMALL.

SEALER OF WEIGHTS AND MEASURES.

NOAH HARDING, Sycamore Street.

SURVEYOR OF WOOD, BARK, AND LUMBER.

SAMUEL T. LITTLEFIELD.

SURVEYOR OF STONE, BRICK, AND PLASTER WORK.

ALFRED M. SIBLEY.

SURVEYOR OF MECHANICS' WORK.

CHARLES D. ELLIOT.

PUBLIC WEIGHERS.

J. C. COUSINS.

D. W. DANFORTH.

JOHN CRAIG.

UNDERTAKERS.

WILLIAM A. FLAHERTY. P. H. RAFFERTY. PATRICK RAFFERTY.
 E. H. MARSH. THOMAS J. BARKER. HORACE D. RONEY

POLICE DEPARTMENT.

M. C. PARKHURST, *Chief.*

R. R. PERRY, <i>Captain.</i>	S. R. DOW, <i>Sergeant.</i>
EDWARD MCGARR, <i>Sergeant.</i>	C. C. CAVANAGH, <i>Sergeant.</i>
JOHN E. FULLER.	P. W. SKINNER.
A. L. STAPLES.	S. A. BROWN.
J. W. OLIVER.	JOHN HAFFORD.
GEORGE W. BEAN.	IVAN LAIGHTON.
GEORGE L. SMITH.	M. H. KINSLEY.
EDWARD M. CARTER.	G. A. BODGE.
E. F. FALES.	DENNIS KELLY.
J. F. JOHNSON.	GEORGE H. CARLETON.
E. A. CARTER.	H. H. MILLER.
EDWARD E. HAMBLEN.	FRANCIS A. PERKINS.
JAMES F. FOLEY.	CHARLES S. THRASHER.
CHARLES L. ELLIS.	WILLIAM H. JOHNSTON.
M. C. PARKHURST, <i>Lock-up Keeper.</i>	

MEETINGS.

BOARD OF ALDERMEN.

Second and fourth Wednesday evenings of each month.

COMMON COUNCIL.

Thursday evenings following the second and fourth Wednesdays of each month,

SCHOOL COMMITTEE.

Last Monday evening of each month.

INDEX.

	PAGE
City Government and Officers for 1886	3
“ “ “ “ 1887	303
Mayor's Inaugural Address	15
Report of the Board of Health	193
“ “ Chief Engineer of Fire Department	263
“ “ City Clerk	295
“ “ City Engineer	249
“ “ “ Physician	211
“ “ “ Solicitor	289
“ “ “ Treasurer and Collector of Taxes	31
“ “ Commissioners of the Sinking Funds	121
“ “ Committee on Fire Department	259
“ “ “ “ Fuel and Street Lights	281
“ “ “ “ Highways	223
“ “ “ “ Public Property	269
“ “ “ “ Sewers	243
“ “ Inspector of Milk	299
“ “ Overseers of the Poor	183
“ “ School Committee	125
“ “ Somerville Mystic Water Board	167
“ “ Trustees of the Public Library	215
Water Contract	179

